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DISCUSSION PAPER SERIES

IZA DP No. 14233

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ABSTRACT

Another Brick in the Wall. Immigration and Electoral Preferences: Direct Evidence from State Ballots*

Using information on actual ballots rather than survey data, we investigate the impact of immigration on both electoral outcomes and immigrant-related motives underlying political preferences. We take advantage of 94 votes, namely 54 policy propositions and 40 elections for candidates, that took place in Californian general elections between 2010 and 2018. We first analyze how the share of immigrants at the census tract level affects electoral outcomes. We find that a rise in immigration is associated with a decrease in people's support for the Democratic party and for liberal measures. Using proposition topics, we show that this effect is driven by policies pertaining to redistribution, public good provision and justice/crime, while other propositions, less directly related to immigration are not impacted. The effect is stronger when immigrants are less assimilated and originate from poor and culturally distant countries.

JEL Classification: F22, D31

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1 Introduction

Over the past fifty years, the United States have witnessed a massive surge in immigration, with nearly 59 million immigrants entering the country from every part of the world (Ottaviano and Peri, 2012; Docquier et al., 2020). The resulting increase in cultural diversity and distance between natives and migrants has made immigration one of the most contentious issues of American politics, leading to occasional nativist reactions and upheavals in times of economic downturn.¹ However, despite such an exposure in the public debate, there is surprisingly little evidence on the impact of immigration on electoral outcomes in the US. In addition, the existing literature does not systematically relate election results to the underlying motives associated with anti-immigration views, partly because of data limitation and the fact that political parties offer a platform that bundles together highly heterogeneous propositions on various topics (Lee and Roemer, 2006).

This paper takes advantage of the unique California electoral system to address these questions. During general elections, every two years, Californian voters are not only asked to choose among candidates but also to vote on various ballot propositions covering several topics such as tax and fiscal measures or the provision of public goods and services, for instance. This unique combination of representative and direct democracy allows us to go further than the existing literature in the analysis of the relationship between immigration and electoral outcomes. In particular, focusing on specific topics among all ballot propositions, we can test whether electoral shifts due to immigration are associated with specific pathways such as redistribution, public good provisions or the fear of crime.

Our empirical analysis is based on an original dataset including 94 votes, namely 40 elections for candidates at elective offices and 54 ballot propositions that took place in California general elections between 2010 and 2018. We construct a Democrat vote share measure that accommodates both types of vote: the share voting for the Democratic candidates for elective offices and, following Brunner et al. (2011), the share of liberal votes for ballot propositions. Then, we combine these electoral data with census information on immigrant and native

¹For instance, the proposition 187, passed by Californian voters in the wake of the early 1990s recession, was intended to ‘save tax payers money’ by denying welfare benefits, education and medical care to illegal immigrants (Alvarez and Butterfield, 2000).

characteristics for 7,895 census tracts.² The share of liberal votes is regressed on the share of immigrants and on an extensive set of fixed effects. In particular, we control for census tract fixed effects to capture long-term spatial sorting of migrants and its correlation with political orientations at a very disaggregated level. In terms of confounding dynamics, we control for county-year fixed effects to grasp local business cycles, employment shocks and changes in redistributive policies that may simultaneously explain an arrival of immigrants and a shift in natives' electoral choices.³

Our results show that immigration reduces support for liberal propositions and candidates. A one standard deviation increase in the share of foreign-born is associated with a 5.8%-9.5% decrease in the Democrat vote (across different specifications). We find a significant decline of the liberal vote share for propositions pertaining to redistribution, public goods and crime, i.e. policies that can be perceived as directly related to migrants. There is no effect of immigration when considering 'placebo' measures, i.e. measures deemed less connected to immigration concerns (such as general regulation, rule and law). We also take advantage of census-tract information to derive a rich heterogeneity analysis regarding both the composition of the natives and the characteristics of the migrants. We show that the impact of immigration on voters' political preferences is the largest when immigrants originate from economically, culturally and genetically distant countries as well as when they are less assimilated to the native population as measured by citizenship or language ability for instance. These results suggest evidence for an in-group bias *à la* Luttmer (2001). Finally, we test for the existence of a labor market channel taking into account unemployment and natives' educational attainment at the local level (Mayda, 2006). We find that voters' support for the Democratic party decreases especially when low-skilled unemployment is high among natives, which is consistent with a labor market competition motive as highlighted by Mayda et al. (2019).

Our contribution is threefold. *First*, to the best of our knowledge, this paper is the first to draw on a direct democracy system to explore the electoral motives behind an immigration effect. The original use of the ballot system, by focusing on specific propositions' topics that

²We also replicate our analysis at the level of the 265 Public Use Microdata Areas (PUMA) of California to check that our conclusions are not driven by the level of analysis.

³We verify that our conclusions remain unchanged when using a shift-share instrument as in Mayda et al. (2019).

can be readily interpreted in terms of anti-immigration attitudes, allows us to link electoral outcomes to voters' implicit perceptions and inclinations about immigration.

Second, despite the very central and controversial nature of immigration issues in US politics, as recalled above, there is a noticeable paucity of research on the link between immigration, electoral outcomes and potential explanatory pathways in the US. Important exceptions include [Mayda et al. \(2019\)](#), who correlate the vote share of the Republican Party with the immigrants' population share at county level between 1990 and 2010, and [Baerg et al. \(2018\)](#) who focus on the impact of unauthorized workers in the state of Georgia. Compared to [Mayda et al. \(2019\)](#), the closest paper to our analysis, we use census tract variation to account for very local trends in both migration dynamics and political attitudes. Our contribution also pertains to the focus on California: this is an important state in terms of economic power, population size and migration history.

Third, we tend to bridge two streams of literature that have evolved in parallel (see the survey in Section 2.1): the one interested in the impact of immigration on electoral outcomes (e.g. [Barone et al., 2016](#)) and the one focusing on specific pathways such as changes in voters' redistributive preferences (e.g. [Alesina et al., 2018](#)). The former literature is based on actual elections but often focuses on specific ballots, which can make it difficult to generalize and study different underlying motives for anti-migrant votes.⁴ The latter stream of research relies on survey data rather than actual elections, and focuses on one dimension at a time, such as the preferences for redistribution ([Alesina et al., 2018, 2019](#)), public spending ([Gerdes, 2011](#)) or the fear of crime ([Bove et al., 2019](#)). We suggest a more unified framework by taking advantage of the Californian direct democracy system: exploiting ballot propositions allows us (i) to uncover changes in natives' specific preferences after a surge in immigration (ii) to check the role of several motives simultaneously, (iii) to rely on *actual* votes on policy propositions rather than on intentions.

The remainder of the paper is organized as follows. Section 2 positions our paper in the relevant strands of the literature and shortly describes the political context of California. Section 3 presents the data and the empirical strategy. The results are discussed in Section 4 while Section 5 suggests an extensive heterogeneity analysis. Section 6 concludes.

⁴Among exceptions, [Tabellini \(2020\)](#) uses historical data for the US to link both electoral preferences and numerous mechanisms including preferences for redistribution. His analysis focuses on US immigration from 1910 to 1930.

2 Background

This section presents the literature on the effect of immigration on electoral outcomes as well as on attitudes and preferences. We then describe the electoral system in California and its instruments of direct democracy.

2.1 Literature

Immigration and Electoral Outcome. A first stream of research analyzes the impact of immigration on electoral outcomes and party preferences. Using electoral data, several studies show that rising immigration is broadly associated with an increased support to anti-immigration parties. Some of the evidence points to a move in favor of center-right coalitions, such as in Italy (Barone et al., 2016), but also of far-right parties including the Front National in France (Edo et al., 2019), the Swiss People’s Party (Brunner and Kuhn, 2018), the Freedom Party in Austria (Halla et al., 2017) or nationalist parties in Denmark (Harmon, 2018). These effects are also associated with a decline in support to liberal parties, e.g. in Otto and Steinhardt (2014). The picture is sometimes more complex and depends on natives’ heterogeneity: according to contact theory (Allport, 1954), those who have repeated interactions with migrants/refugees may show less prejudices and less inclinations toward far-right ideas.⁵ This literature focuses to a large extent on the impact of refugees in Europe, while the picture may be completely different for the US and in the context of regular migrants (Alesina and Glaeser, 2004).

As noted in the introduction, this literature cannot systematically test the mechanisms at stake – e.g. labor market competition, cultural diversity, fear and xenophobia, etc. – on the basis of electoral data. A reason is that these studies often focus on specific types of election and for specific elective offices (e.g. presidential). Another concern is the prevailing

⁵For Austria, Steinmayr (2020) finds a contrasted effect compared to Halla et al. (2017) and in line with contact theory. In Denmark, the result of Harmon (2018) is also mitigated by Gerdes (2011): voters voice their displeasure about immigration but there is no clear indication of a general decline in support for pro-welfare state parties on account of immigrants. Dustmann et al. (2018) use the random allocation of refugees and point to a sharp divide in attitudes to refugees between urban citizens, more likely to have immigrants as friends or colleagues, and rural populations. Heterogeneity may also be on migrants’ side. Moriconi et al. (2019) find that highly educated immigrants push natives to increase their support for the welfare state while low-skilled immigrants have the opposite effect.

role of subjective rather than objective information. That is, the geographical dispersion of electoral results can be compared to actual changes in objective measures such as welfare reforms, labor market outcomes or crime rates, but electoral results might rather depend on natives' perceptions about migrants as a cost, a competition or a threat. Recent studies have actually explored this aspect by looking at the role of politicians' endorsement of specific anti-immigration policies or the salience of immigration issues in shaping these perceptions (Hatton, 2017; Grigorieff et al., 2020; Alesina et al., 2018; Barrera et al., 2020). In this paper, we extract ballot results for specific propositions that can be connected to immigration 'issues', including redistribution, public goods and crime.

Immigration and Natives' Attitudes or Preferences. A related literature precisely explores how immigration affects specific outcomes pertaining to natives' perceptions, attitudes and preferences. These outcomes often comprise natives' preferences for redistribution, their willingness to contribute to public goods or the way they perceive labor market competition and cultural diversity.⁶ The bulk of this literature focuses on the attitudes towards redistribution using survey data and variation in migrants' share over time and space (e.g. for Europe, Alesina et al. (2019), using regional variation, or Senik et al. (2009), using country variation and individual perceptions). The causal analysis is sometimes improved using the random placement of immigrants within a country (Dahlberg et al., 2012). Labor market competition tends to play a secondary role in Europe (Edo et al., 2019). Several studies indicate relatively more support for immigration when natives have higher skills than migrants (Mayda, 2006; Facchini and Mayda, 2009) or hold jobs that are less exposed to competition (Ortega and Polavieja, 2012). For some studies in the US (Hainmueller and Hopkins, 2014; Hainmueller et al., 2015) or the UK (Dustmann and Preston, 2007), labor market competition tends to explain little of the attitudes towards immigration, at least compared to welfare concerns or racial/cultural prejudice and distance.

The literature points to cultural concerns as an important driving force behind the skepticism towards immigration. Belonging to a larger research body on the relationship between cultural/social fragmentation and the welfare state (see the reviews by Alesina and Giuliano, 2011 and Stichnoth and Van der Straeten, 2013), it usually points to lower degrees of support

⁶We do not review the huge literature on the *actual* effects of immigration on objective outcomes such as wages, employment or public finance. See the excellent survey by Edo et al. (2018) and, for the link between immigration and objective crime, see Bove et al. (2019).

for redistribution within groups that are more heterogeneous in terms of race, ethnicity, religion, nations, etc. Against this background, we will study how the immigration effect varies with migrants' nationality and assimilation (measured by language proficiency) as well as the role of economic and genetic distance.

More generally, past work on immigration, and the size and composition of public spending, has emphasized changes in preferences for tax rates, public goods provision and redistribution as a consequence of increased ethnic heterogeneity (e.g. [Alesina et al. 1999](#); [Luttmer 2001](#); [Razin et al. 2002](#); [Speciale 2012](#); [Dahlberg et al. 2012](#)). Note that there is much less systematic evidence regarding immigration and the choice of specific local public spending ([Gerdes, 2011](#)). In particular, there is hardly any work on the link between immigration, fear of crime and the share of public resources devoted by local governments to security (an interesting exception is [Bove et al. \(2019\)](#), focusing on variation across Italian municipalities). In this context, we examine an array of mechanisms including redistribution and public goods but also ballot propositions related to crime and insecurity.

Another advantage of our approach is that we do not rely on surveys, as in the aforementioned literature. Estimations based on surveys are potentially affected by a self-reported bias, a participation bias (i.e. they are not always representative of national electorates, cf. [Krishnakumar and Müller, 2012](#)) and an hypothetical bias (they do not necessarily align with individual attitudes on voting day, cf. [Miguet, 2008](#)). We tend to avoid all three issues. In particular, the participation bias is not a problem as we focus here on the actual electorate. The hypothetical bias may affect people answering opinion polls while we focus on voters, who tend to make more informed decisions and at least know that their choice is binding.

Direct Democracy. Finally, we provide new evidence on direct democracy. The literature on immigration and party preference usually ignores the fact that shifts in the preferences of the electorate are not necessarily followed by the implementation of anti-immigration policies by the new incumbents. Using ballot data, we consider electors who vote on propositions that potentially have effective consequences on immigrants. In that sense, we contribute to the limited literature on local democracy in the US. The literature is usually based on the Swiss system of canton-level referendum and relates immigration with votes on general topics ([Funk and Gathmann, 2011](#)) or immigration policies ([Krishnakumar and Müller, 2012](#); [Miguet, 2008](#)).

2.2 Politics of California and Ballot System

The electorate is composed of US citizens aged 18 or above and residing in the state. This population is allowed to register to the electoral college to take part in general elections. Non-citizens are, by definition, excluded from the vote. Every two years (even years), registered voters are asked to participate to primary elections in July and to general elections in November. Due to the nature of primary elections, which are by definition not representative of the whole political spectrum, we focus on general elections. The latter involve all the political parties and two types of ballots: on the same day, voters are asked to choose candidates for elective offices and to vote on policy propositions.⁷

Regarding the choice of candidates, general elections include votes on different types of elective offices (presidential, gubernatorial, senatorial elections, etc.), as reported in Table A1 in the Appendix. California currently uses the non partisan blanket primary (with the exception of San Francisco and Berkeley that use a system of preferential voting). Candidates regardless of party, including multiple nominees from a single party, contest the ballot and the two candidates with the highest numbers of votes are entered into a general election. While Republican have prevailed between 1952 and 1988, Democrats have won all major elections since 1992. Largely considered as a “blue state” today, California still shows much spatial heterogeneity in the electorate (see Figure A1 for the 2016 Presidential election as an example). Of the 19,696,371 California voters registered for the November 6, 2018, general election, 43.5% were Democrats, 24.0% were Republicans, 27.5% were independents voters and 5.0% were affiliated with other parties (American Independent Party, the Green Party, the Libertarian Party, and the Peace and Freedom Party).

During general elections, Californian voters are also asked to decide in favor or against various propositions covering several topics (tax and fiscal measures, public good provision, moral issues, health issues, courts and regulation, etc.).⁸ A measure can be placed on the ballot by the legislature (constitutional amendments, bond measures and proposed changes in law) or by Californian voters themselves, allowing them to influence public policy. In the latter

⁷See Figure E2 in the Appendix for an example of voting sheet for the 2018 general election including elections for candidates and ballot propositions.

⁸Direct democracy through ballot propositions is used in 27 US states and Washington D.C. Since 1912, 354 citizens’ initiatives have appeared on the state ballot in California, and the last 20 years have seen a sharp rise in the number of initiatives.

case, registered voters can propose a policy initiative (proposition of a new law) or a veto referendum (suggested repeal of an existing law), provided that they gather a predetermined number of signatures to qualify the proposition.⁹ For passage, a proposition made by the legislature or by the people must obtain a majority of ‘yes’ votes among those voting on that proposition (and not among those voting in the election held at the same time). If it passes, it becomes a part of the state constitution or the state’s statutes.¹⁰

3 Empirical approach

This section presents the data (US census and elections data) and the way we construct our main treatment variable (the share of adult foreign-born in the total resident population of a census tract) and the dependent variable (the share of liberal votes), followed by the empirical strategy.

3.1 Immigrant shares

Immigrants in California census tracts. We rely on US census data from the entire voting age Californian resident population at the census tract level, drawn from the American Community Surveys (ACS) and provided by the National Historical Geographic Information System (NHGIS) (Manson et al., 2019). Census tracts are small subdivisions of a county that include around 4,500 inhabitants on average with a maximum of 8,000 residents. They are designed to be relatively stable over time.¹¹ We focus on the 2010-2018 period, guided by the availability of the ACS at the tract level, which starts in 2009. We use almost all the

⁹The initiative signature requirement, expressed as a percentage of the votes cast for governor in the previous election, is 8% for constitutional amendments and 5 % for veto referendums in 2020. For additional information on ballot propositions and the initiative process in California, see <https://www.sos.ca.gov/elections/ballot-measures/>.

¹⁰Before election day, the California Secretary of State provides to each registered voter an official information voter guide that includes a summary of the proposition, its fiscal impact as well analysis and arguments in favor and against the statewide ballot measure. While including information on supporters and opponents in the voter information guide, ballot propositions appear in the text without any party identification. We report the proposition set 30 of the 2016 general elections as an example in Appendix E.

¹¹Tract boundaries are re-defined every 10 years, following major population changes, and are constant over our period of investigation

variation across the 7,895 census tracts of California, corresponding to 54 counties.¹²

ACS collects survey information on a regular basis but aggregates results over a longer time period, namely 5 years in our case. It allow us to capture meaningful time variation in migrant share at such a disaggregated level. It might also mask rapidly developing changes in some places, which would, if anything, lower the magnitude of our estimates. As a robustness check, we shall provide alternative estimates using 1-year ACS data aggregated at a larger unit scale, namely the Public Use Microdata Areas level (PUMA). PUMAs contain at least 100,000 people and are nested within states.

The definition for immigrant that is retained in this paper is the place of birth (the terms immigrants and foreign-born will be used alternatively thereafter). We focus on the number of voting-age foreign-born individuals in the tract resident population and their characteristics.¹³ Foreign-born individuals comprise both non-citizens and naturalized immigrants. As shown later, our results are not affected by this definition – naturalization will be treated as one of the criteria of assimilation in heterogeneous analyses. Our results suggest that naturalized immigrants do not really impact voters’ electoral preferences.

Immigrant share variable. Our main treatment variable, denoted Mig_{ty} , is the share of foreign-born in the total resident population, written as:

$$Mig_{ty} = \sum_i^I share_{ity} \tag{1}$$

with $share_{ity}$ the share of adult individuals born in country i and living in census tract t in the tract total voting age resident population at year y (share expressed between 0 and 100). It captures the size effect of immigration. We also provide additional results using a Greenberg index (Alesina et al., 2016), which allows us to combine information on migrants’ economic and cultural distances to US citizens.

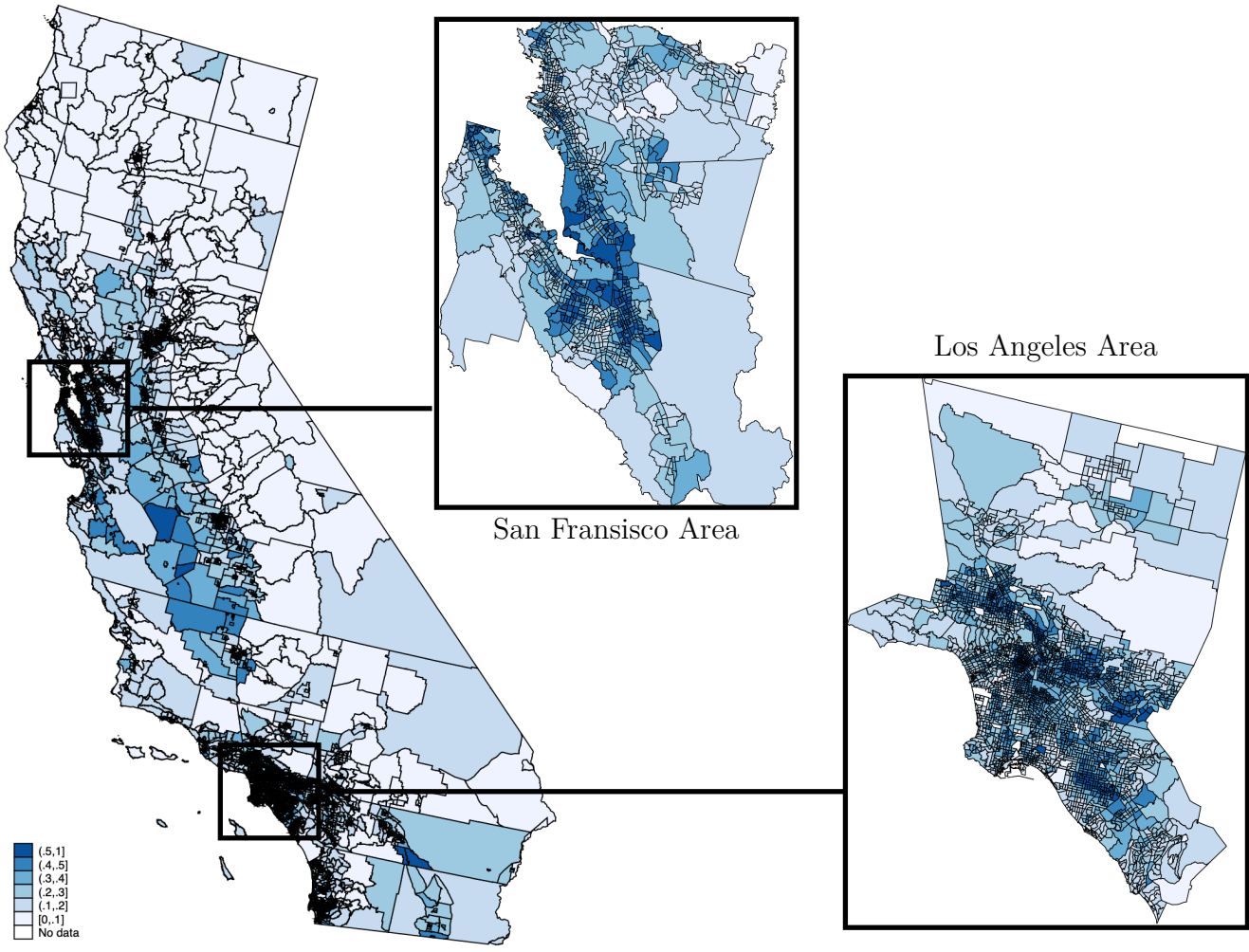
Table B1 in the Appendix presents average characteristics of the foreign-born population. The average share of foreign born between 2010-2018 in California is 26.9 percent, with

¹²We exclude five counties, Amador, Plumas, Santa Cruz and Siskiyou, comprising 83 census tracts. For them, the Statewide Database used for electoral outcome, presented hereafter, reports inaccurate data due to the absence of reliable maps to make the registration to census consolidations. See <http://statewidedatabase.org/info/merge/prbl.html>.

¹³There are 133 different countries of origin as listed in Appendix F.

similar proportions of non-citizens and naturalized immigrants. We observe that language proficiency is polarized and the bulk of immigrants in California comes from the Americas (mainly Mexico) and Asia. Figure 1 depicts the dispersion of immigrant shares across census tracts of California. The highest immigration rates tend to be located along the West coast but we observe variation in all parts of the state. There is a high concentration of migrants around San Francisco and Los Angeles. We also observe much heterogeneity across tracts within these broad areas.

Figure 1: Share of immigrants in California census tracts (2010-2018 average)



Notes: Figure 1 reports the average share of immigrants in the total Californian resident population between 2010 and 2018 at the census tracts level. Source: Authors' elaboration on NHGIS data.

3.2 Electoral outcomes

General election data. We take advantage of electoral data from the Statewide Database maintained by the Institute of Governmental Studies (IGS) at the University of California at Berkeley. It provides aggregate vote outcomes and voter registration for all statewide primary and general elections held in California since 1990.¹⁴ We focus on the five general elections of 2010, 2012, 2014, 2016 and 2018 including 40 different votes for candidates (at various elective offices, cf. Table A1) and 54 ballot propositions (including initiatives and legislative referendums). Our estimations will combine information on both types of vote to yield an overall liberal vote share or will consider each type of vote at a time.

Electoral outcome measures. Our dependent variable, denoted $Vote_{tyv}$, aims to capture voters' political preferences in tract t at year y and vote v (several votes take place in November of each selected election year). This variable measures the more or less 'liberal' nature of the vote as expressed by the support to a candidate or a policy measure depending on the nature of the election. Regarding elections for *candidates*, we compute our dependent variable $Vote_{tyv}$ as the share of registered voters choosing a candidate officially affiliated to the Democratic party. For votes on *propositions*, we adapt the approach of Brunner et al. (2011) in order to systematically classify the propositions as liberal or conservative. For each of the 54 propositions, we run separate regressions of the following form:

$$Yesvote_t = \beta_1 Dem_t + \beta_2 Rep_t + \beta_3 Ind_t + \varepsilon_t \quad (2)$$

$$Novote_t = \beta_4 Dem_t + \beta_5 Rep_t + \beta_6 Ind_t + \varepsilon_t \quad (3)$$

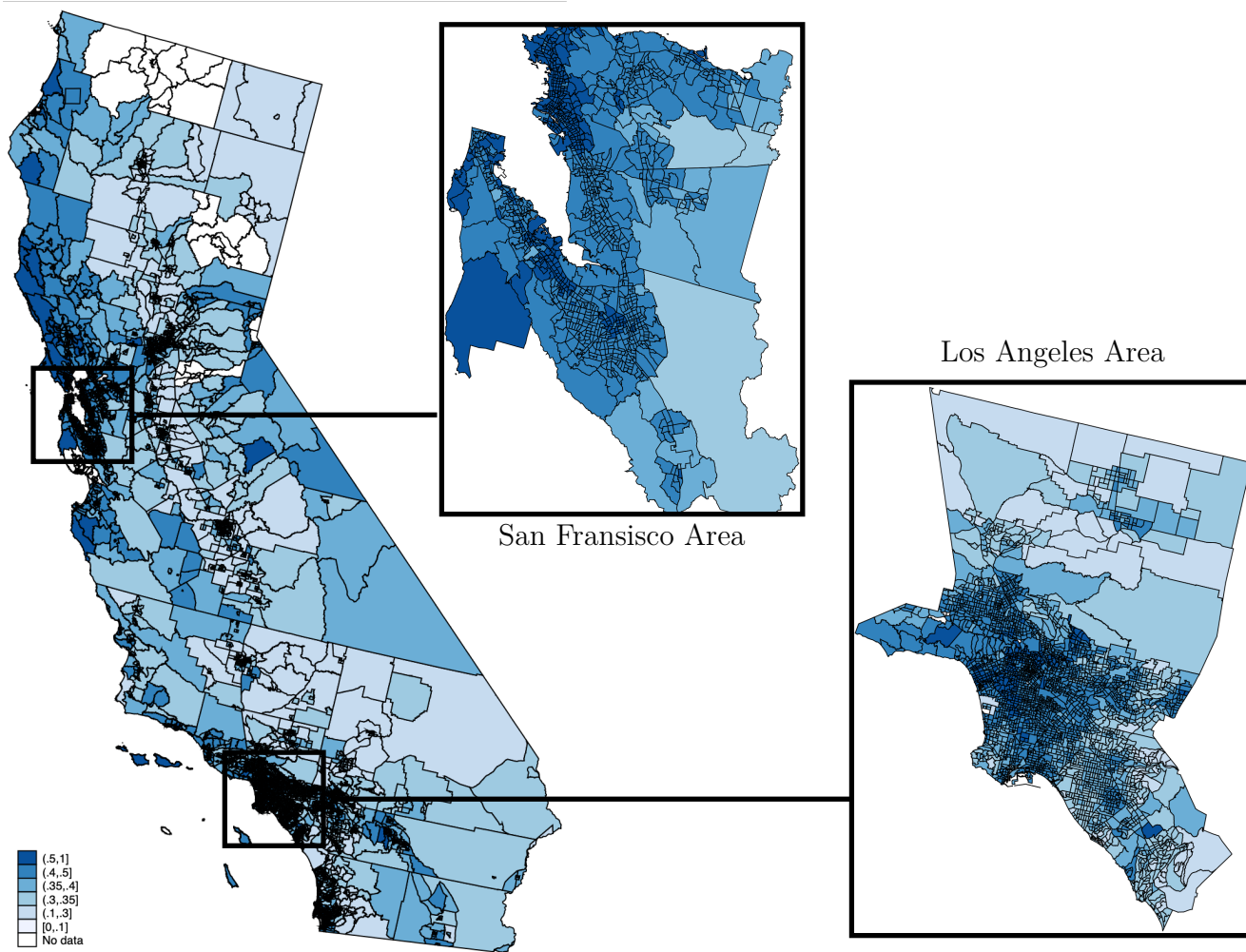
where $Yesvote$ ($Novote$) is the share of registered voters in tract t who vote Yes (No) at a given ballot and Dem , Rep , Ind are the proportions of voters registered as Democrats, Republicans or Independent respectively. Using estimated coefficients, we compute the relative propensity of Democrats to vote in favor of a given proposition as:

$$RelativeProp = (\hat{\beta}_1 - \hat{\beta}_2) - (\hat{\beta}_4 - \hat{\beta}_5). \quad (4)$$

As explained by Brunner et al. (2011), the relative propensity score varies between -2 and 2 . A score of -2 means that all registered Republican voters in the tract are predicted to

¹⁴Electoral outcomes as well as party affiliations of the voters are only reported at the level of precincts, which are smaller than tracts and not administrative units. We aggregate electoral outcome from voting precincts to census tracts using conversion files provided by the Statewide Database.

Figure 2: Share of liberal votes in California census tracts (2010-2018 average)



Notes: Figure 2 reports the average share of liberal votes in Californian ballots and gubernatorial elections between 2010 and 2018 at the census tracts level. Source: Authors' elaboration on IGS data.

vote in favor of the proposition while all registered Democrat voters are predicted to vote against. A score of 2 means the opposite while a score of 0 means that voting patterns were independent of the party composition of the registered voters. Propositions with a positive (negative) relative propensity score are classified as liberal (conservative).¹⁵ Finally, $Vote_{t,y}$ for ballot propositions is simply the share of registered voters in favor of (against) a

¹⁵Estimated relative propensities range -1.07 to 1.54 with a mean of 0.46. Detailed estimations and results are available upon request. The complete list of propositions is reported in Table E1 in the Appendix together with their classification as liberal or conservative.

proposition classified as liberal (conservative).¹⁶

Descriptive statistics. Regarding elective offices, we find an average Democrat vote of 39.2 percent across all census tracts and for the 2010-2018 period. With the aforescribed approach to classify ballot propositions, we obtain an average support for Democrat proposition of 40.3 percent. For our baseline estimations, we pool these measures into a general Democrat share outcome. Its spatial dispersion can be seen in Figure 2.¹⁷

3.3 Empirical strategy

This section presents our empirical strategy aimed at estimating the impact of immigration on political preferences and potential pathways. Combining the different variables previously described, our sample comprises electoral outcomes and information on immigrant and natives' characteristics at census tract level. It includes 699,320 observations, which correspond to 7,895 census tracts and 94 votes (40 elections for candidates at elective offices and 54 ballot propositions).

Empirical model. Our baseline approach consists in the estimation of the Democrat vote share $Vote_{tyv}$ in census tract t at year y and vote v on the immigrant population share Mig_{ty} in this tract-year cell. The model is written as:

$$Vote_{tyv} = \alpha + \beta Mig_{ty} + \gamma_t + \theta_{cy} + \varepsilon_{tyv} \quad (5)$$

and can be estimated by simple linear estimation techniques. We keep a parsimonious specification with two main types of fixed effects in the baseline, namely census tract effects γ_t and county time dummies θ_{cy} . For sensitivity checks, we will provide additional estimates controlling for census-tract information on local electorate structure and economic conditions.

¹⁶Brunner et al. (2011) provide robustness checks associated with the reliability of their methodology using individual surveys from the Public Policy Institute of California. They collect information on 91 propositions from 1990 to 2004 and show that $Vote_{tyv}$ is highly correlated with the Democrat (Republican) affiliation of the supporters of (opponents to) the proposition, as well as with monetary support from the Democrat party to the policy measure.

¹⁷There is a positive correlation of .25 between the dispersion of Democrat support in general elections and the location of immigrants (as reported in Figure 1) across census tracts. This suggests that the spatial allocation of immigrants across tracts is not random and that our empirical approach must control for long-run differences across Californian tracts.

Robustness analyses will also include vote fixed effects, which allow us to control for the nature of the ballot within a given general election (for instance, whether it is for a candidate or a proposition), and possibly to increase the precision of the estimations (Mayda et al., 2019). In all our specifications, standard errors are clustered at county level to account for potential correlations across census tracts within a county.¹⁸

Identification. We now discuss how our empirical strategy allows us to identify β , interpreted as a change in political preferences, while eliminating the main threats to identification. The relationship between $Vote_{tyv}$ and Mig_{ty} may be affected by unobservable confounders that would simultaneously affect electoral outcomes and the share of voting age foreign-born in a given census tract. We first address the issue of time-invariant unobservables. Census tracts may present persistent local conditions (e.g. local culture and long-term political orientations), which can both explain current political orientation and immigrant location. A non-random spatial sorting of immigrants in the most Democrat parts of California is illustrated by the positive correlation between immigrant shares (Figure 1) and liberal vote shares (Figure 2).¹⁹ This association, and more generally long-term local characteristics, are accounted for using tract fixed effects γ_t .

As far as time-varying unobservables are concerned, preliminary estimates will account for a set of year dummies θ_y , which capture events that are common to all Californian tracts, such as state-level migration waves or economic shocks, for instance. Our main specification will replace it by county \times year fixed effects θ_{cy} , aiming to control for time-varying confounding factors that simultaneously change natives' electoral preferences and the location of immigrants. Confounding dynamics in migration could stem from exogenous changes in economic opportunities (due to favorable business cycle) or exogenous increases in welfare generosity (welfare magnet).²⁰ We argue that these potential biases pertain to economic conditions

¹⁸Alternative clustering has been tested, notably at tract level in case of autocorrelation over time at this disaggregated level. Given the sample size, estimates are very precise and alternative options make no difference.

¹⁹Bracco et al. (2018) provide suggestive evidence that immigrants tend to avoid areas with higher level of anti-foreigners attitudes. For our setting, this would imply that immigrant traditionally reside in areas where attitudes towards immigrants are positive and by extension where a larger share of the native population votes Democrats.

²⁰For instance, an exogenous increase in liberal ideas could act as a pull factor for migrants: this reverse causality would attenuate our estimated effect.

or welfare policies that most likely correspond to broader geographic levels than the census tracts and, hence, are controlled by time trends at county level.

Interpretation. Historically, Democrats are usually associated with ideas and policies that are relatively more pro-immigration. Empirical evidence tends to confirm these trends.²¹ However, Democratic support is not unwavering and may also fluctuate in response to (large enough) migration inflows. Thus, our coefficient of interest β is primarily interpreted as the potential negative impact of immigration on liberal voting. We will explore the potential pathways through which a conservative response to immigration may operate or be amplified (cultural distance, security concerns, redistribution, public goods and labor market competition).

Beyond a possible change in political preferences, migration may also affect the nature of the electorate. There can be a crowding-out effect if the arrival of migrants pushes away the most conservative voters among local residents (Borjas, 1999; Card et al., 2008). Inversely, the naturalization of some of the migrants can change the political composition of the local electorate and make it more liberal.²² Hence, both mechanisms would drive our estimate downward, making it a lower bound of the negative effect of migration on liberal vote. To address this double phenomenon, we will provide additional estimations controlling for the turnout rate at each election and for the ethnic/racial composition of the tract. Following Mayda et al. (2019), we will also adopt a shift-share strategy as an additional robustness check.

4 Baseline results

This section presents our main empirical results, namely the impact of immigration on voters' political preferences and an investigation of possible pathways.

²¹Several papers convincingly show that Republican legislators are less likely to vote for pro-immigration policies (Facchini and Mayda, 2009; Conconi et al., 2020). Using data from the Pew Research Center, Mayda et al. (2019) find a strong relationship between being identified as Republican vs. Democrat and having negative vs. positive stance towards immigrants respectively.

²²Naturalized immigrants could also vote against immigration if they feel exposed to labor market competition from new immigrants (D'Amuri et al., 2010). This would drive the bias in the opposite direction.

4.1 Immigration and political preferences

Baseline estimates. Table 1 reports our baseline results. We first present the estimation of β under alternative fixed effect structures and specifications. In column (1), we run a naive regression where we simply control for time effects but ignore the geographical sorting of migrants. As discussed above, the positive coefficient on the share of immigrants confirms the long-term spatial correlation between migrants density and support for the Democratic party. The sign of the effect becomes negative, and significant at the one percent level, when we control for census tract fixed effects, as seen in column (2). This result complies with our primary interpretation of a decrease in support for Democratic candidates/propositions following an increase in the foreign-born share.

Adding county \times year dummies in model (3), we take into account time-varying confounders such as changes in economic opportunities or in welfare policies at county level. The coefficient becomes smaller in absolute value, possibly because some of the variation in immigration is now captured by θ_{cy} . Yet, these county time effects controlling for confounding dynamics, this is an interesting conservative estimate of the migration effect, as laid out in equation 5. It is still significant at the 1% level and sizable. It can be expressed as follows: a one standard deviation increase in the share of foreign-born is associated with a 2.3 percentage point decrease in the votes for liberal candidates/measures, i.e. a decrease of 5.8% (or 11.5% of a standard deviation) in Democrat vote.

We also suggest sensitivity analyses where we account for less flexible county time trends, i.e. linear time trends over 2010-18, in case θ_{cy} was exhausting all the relevant source of variation in migration inflows. Column (4) points to very similar results compared to the estimates obtained with the more flexible time structure.²³ A somewhat opposite concern may arise if time-varying confounders, such as changes in welfare policies or a thriving economic context, exist at the most disaggregated level. We have argued that redistributive policies are rarely decided at the tract level, and business cycles or labor markets also correspond to broader geographical areas. Nonetheless, we suggest sensitivity checks by controlling for economic conditions at the census tract level. They include the local unemployment rate and (inflation-adjusted) median earnings for the working age population, computed for low-skilled and high-skilled separately. Column (5) shows that our coefficient of interest is hardly affected.

²³This conveys that the bulk of the variation driving our result is the tract-level immigration inflows, which are deemed less endogenous to confounders pertaining to economic opportunities and welfare magnets.

Table 1: Effect of Migrant Share on Electoral Outcome, Baseline estimates

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mig_{ty}</i>	0.093*** (0.027)	-0.218*** (0.041)	-0.161*** (0.024)	-0.155*** (0.028)	-0.155*** (0.023)	-0.140*** (0.022)
Year FE	✓	✓				
Census tract FE		✓	✓	✓	✓	✓
County × Year FE			✓		✓	✓
County × linear time trend				✓		
Economic controls					✓	
Voting Pop. Weights						✓
Nb. Observations	699,320	699,320	699,320	699,320	699,320	699,320
Nb. Propositions	54	54	54	54	54	54
Nb. Elec. Candidates	40	40	40	40	40	40
<i>R</i> ²	0.570	0.702	0.723	0.505	0.723	0.721

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 or more). Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Observations in column (6) are weighted by the voting population in the tract. Source: Authors' elaboration on NGHIS and IGS data.

Finally, a legitimate concern would arise if our results were driven by sparsely populated tracts, which would play as statistical outliers in the analysis. We tackle this issue in column (6): observations are weighted by the voting population at tract level, namely the number of natives and naturalized immigrants aged 18 and over. Despite a slight decrease in our coefficient of interest, our conclusions remain unchanged. Note that all the estimations discussed above are replicated when including vote fixed effects, as done in Brunner et al. (2011) and Mayda et al. (2019), which leads to very similar results (see Appendix Table C1).

Changes in electorate composition. As discussed before, our benchmark effect is interpreted as a decreasing support for Democratic candidates/propositions by the local electorate, which was assumed stable. Other mechanisms may be at play that change the com-

position of this electorate, namely the arrival of naturalized migrants (Mayda et al., 2019) and the crowding-out of the most conservative natives (Card et al., 2008). If the electorate changes and becomes more liberal because of both forces, our estimate will be underestimated, at least when interpreted as a change in party preferences. Table 2 first reproduces our conservative estimate (column 1). Then we control for the racial/ethnic composition of the tract (column 2), which may have itself changed with migration. To do so, we construct an index of minority share *à la* Card et al. (2008), which is purged from its correlation with the share of foreign born.²⁴ In column 2, our coefficient of interest now increases by 47%, which could indeed reflect the changing composition of the potential voters, i.e. the arrival of naturalized migrants (possibly pro-Democrat) and the departure of radical conservative voters. Since these two groups possibly have different electoral participation behavior compared to the average of the tract, we must also account for the potential change in turnout.²⁵ Estimations in column 3 control for turnout at each vote. They point to a slightly additional increase in the coefficient of interest. A one standard deviation increase in migrant share now leads to a drop of 3.9 ppt in Democrat votes (-9.5%, or 19.5% of a standard deviation). Weighting observations by the voting population of each tract does not change our conclusions (column 4).

Immigrant origins and concentration effects. We check whether our main result is driven by the concentration of immigrants from particular countries of origin, particularly by Mexican immigrants who account for almost 40% of the total immigrant population in 2018. Using our conservative specification, we find an estimate of the Mexican migrant share of $-.226^{***}$ (s.e. of $.037$), i.e. 1.4 larger than the benchmark estimate ($-.161^{***}$). If we withdraw Mexicans from our overall migrant share, we find an estimate of two-third the baseline result, which is still large and highly significant ($-.092^{***}$ with s.e. of $.018$). To go further, we suggest estimations that account for the distribution of origin countries. The alternative indexes are described in detail in the Appendix D. Particularly, we use

²⁴Minorities include all residents but non-hispanic whites. The correlation between the racial minority share and the foreign-born share in the population is 0.7. Our minority measure is the residual component extracted from a regression of tract-level racial minority shares on immigration shares. To account for the two-step estimation procedure, we have bootstrapped standard errors, clustered at the county level, using 500 replications. Standard errors barely change in this case.

²⁵In Appendix G, we provide additional results specifically looking at the effect of immigration on voter turnout.

Table 2: Effect of Migrant Share on Electoral Outcome, Composition effects

	(1)	(2)	(3)	(4)
<i>Mig_{ty}</i>	-0.161*** (0.024)	-0.236*** (0.041)	-0.272*** (0.042)	-0.253*** (0.044)
Census tract FE	✓	✓	✓	✓
County × Year FE	✓	✓	✓	✓
Ethnic composition		✓	✓	✓
Voter turnout			✓	✓
Voting Pop. Weights				✓
Nb. Observations	699,320	699,320	699,320	699,320
Nb. Propositions	54	54	54	54
Nb. Elec. Candidates	40	40	40	40
<i>R</i> ²	0.723	0.723	0.727	0.725

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 or more). Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Ethnic composition is the minority share (residents who are not non-hispanic whites), purged from its effect on the share of foreign born in the tract. Voter turnout is calculated as the proportion of participants at each vote in the overall citizen population (voting age population comprising natives and naturalized immigrants). Last column: observations are weighted by the voting population in the tract. Source: Authors' elaboration on NGHIS and IGS data.

birthplace diversity indexes (including US natives) that allow us to estimate the impact of immigration on voters' preferences at the intensive and extensive margins. Interestingly, the estimated coefficients for the Polarization and the Theil index (within vs. between components) in Table D1 in the Appendix suggest that immigration is rather playing at the intensive margin, meaning that the effect of immigration on electoral preferences in California is not driven by the mere entry of immigrants from new origins in a given census tract but by an increase in the concentration of preexisting diasporas. This result is consistent with

the more qualitative analysis on Mexican-born immigrants, which shows a larger effect for a group of high concentration.

4.2 Voting on Redistribution, Public Goods and Crime

Separate results for candidates and propositions. We first replicate previous estimations separately for the two types of vote, namely for candidates to elective offices and for propositions. Results in Appendix Tables C2 and C3 convey very similar results in both cases and compared to the joint baseline. The effect is only slightly larger in the case of votes for candidates. These conclusions are comforting regarding our ability to focus on ballot propositions only, as we aim to exploit the nature of propositions to explain the potential motives behind a change in political preferences.

Proposition topics. Following this idea, we re-estimate the model for subsets of the proposition ballots, depending on the topics put at vote. In the Statewide Ballot measure Database, each ballot is identified according to one or several topics. We complement this information by text-analyzing the Voter Information Guide and classify ballot propositions according to four non-mutually-exclusive categories. The first one, labeled *Redistribution*, groups six propositions about the progressivity of the tax system, generally in order to fund public goods such as education or subsidies. A second and related category, *Public Good*, pools 22 ballot propositions, some of which are included in the previous category. They either deal with the direct funding of public goods (mainly health, education or infrastructure programs) or affect existing ones through a change in their dedicated budget. A third category, *Crime*, gathers 9 propositions related to legal measures on crime and justice (including votes related to death sentences). Last, we group 7 propositions on topics deemed neutral to migration – but not neutral in general as they correlate with different votes across parties. These propositions relate mostly to redistricting, regulations and changes in civil and constitutional law. We treat this set of proposition as a placebo outcome given that they do not have obvious linkages with immigration and the impact of policies on migrants. The model with census-tract FE and county-year FE is estimated on sub-samples corresponding to each of the aforementioned categories.

Estimates are reported in Table 3. We observe significant effects of migration on the share of Democrat votes in the case of propositions related to redistribution, public goods and crime,

Table 3: Effect of Migrant Share on Electoral Outcome by Propositions' Topics

	(1)	(2)	(3)	(4)
	Redistribution	Public Goods	Crime	Placebos
Mig_{ty}	-0.173*** (0.030)	-0.191*** (0.029)	-0.135*** (0.026)	0.000 (0.006)
Census Tract FE	✓	✓	✓	✓
County \times Year FE	✓	✓	✓	✓
Nb. of Observations	47,132	172,807	70,716	55,017
Nb. Propositions	6	22	9	7
R^2	0.825	0.693	0.643	0.465

Note: The dependent variable is the share of voters in favor of the proposition if this latter has been classified as “liberal” or the share of voters against the proposition if the proposition has been classified as “conservative”, following [Brunner et al. \(2011\)](#). Mig_{ty} is the share of foreign born in the census tract resident population (aged 18 and more). Standard errors clustered at the county level are reported in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: Authors’ elaboration on NGHIS and IGS data.

namely the topics that are potentially associated with concerns towards immigration in the US debate. We find no significant effect of migration on the votes for ballot propositions pertaining to the placebo category. To ensure that this result is not induced by a lack of statistical power due to the small number of ballot propositions, we compute the minimum detectable effect at conventional power (80%) and statistical significance (5%) levels ([Ioannidis et al. 2017](#)). We find that our regressions are powered to detect an effect as small as -0.02, compared to a significant baseline estimate of -0.161. Note that estimates for propositions related to redistribution and crime also use a small number of propositions and still report coefficients of a similar magnitude.

4.3 Alternative Identification Strategy

Our analysis is conducted at the census tract level. This allows us to control for a rich set of fixed-effects (i.e county-year and census tract fixed effects), which tackle the main threats to identification induced by omitted variables. We have also assumed that reverse causality,

e.g. an exogenous rise in liberal policies that would attract new migrants, would operate at county level or above. Yet, it is possible to adopt a shift-share strategy in addition to previous robustness checks. Moreover, we can also check if our results are sensitive to the disaggregation level and the frequency of collection of immigration data.

Shift-share Instrumentation. The shift-share methodology is known to have limitations,²⁶ but is still widely used in the migration literature and in particular when looking at the relationship between immigration and political outcomes (e.g. Barone et al., 2016; Halla et al., 2017; Mayda et al., 2019; Moriconi et al., 2019). The underlying intuition is that persistent networks represent one of the main determinant of the location decisions of immigrants. We follow Mayda et al. (2019) and define, for 2000, the share of adult natives living in tract t in the total adult population of California, which is written:

$$Sh_{CA,t,2000} = \frac{N_{t,2000}}{\sum_t N_{t,2000}} \quad (6)$$

with $N_{t,2000}$ the number of natives in tract t in the 2000 census. In the same way, for the year 2000, we define $Sh_{i,t,2000}$ the share of adult foreigners born in country i and living in tract t in the total population of foreigners from country i in California:

$$Sh_{i,t,2000} = \frac{M_{i,t,2000}}{\sum_t M_{i,t,2000}} \quad (7)$$

with $M_{i,t,2000}$ the number of foreign-born from country i living in tract t in 2000. Then, our instrument combines the predicted size of the resident population with the predicted size of the foreign-born population in tract t at year y such that:

$$\widehat{Mig}_{ty} = \frac{\widehat{M}_{ty}}{\widehat{Pop}_{ty}} = \frac{\sum_i Sh_{i,t,2000} \times M_{iy}}{\sum_i Sh_{CA,t,2000} \times N_y + \sum_i Sh_{i,t,2000} \times M_{iy}} \quad (8)$$

Each of the two predicted populations, namely \widehat{M}_{ty} and \widehat{Pop}_{ty} , are weighted average of the state inflow rates from each country (“the shift”), where weights depends on the 2000 initial distribution of immigrants or natives (“the shares”).

Results are provided in Table C4. In all estimates, the Kleibergen Paap F-statistics suggest that our instrument is strong. Our conclusions are qualitatively unchanged and the share of

²⁶Two studies show that existing and persistent correlation between economic/political conditions and the settlement of migrants may challenge the exogeneity of the shift-share instrument (see Goldsmith-Pinkham et al. (2020) and Jaeger et al. (2018) for discussions).

immigrants has still a negative and highly significant impact on the share of liberal votes. This holds for the full sample (col 1-2), for election candidates only (col 3) and for specific propositions (col 4-7) while the effect for the placebo group of propositions is again statistically insignificant (col 8). Admittedly, IV estimates are much larger, in absolute value, than our baseline results. Several explanations can be given. First, as argued above, OLS estimates are a lower bound of the true effect. Second, a LATE interpretation of our instrument could be at play (Angrist and Krueger, 2001): it is likely that the shift-share instrument gives more weight to particular country-of-origin groups that have a much more negative impact on votes than others. In this regard, we note that OLS regressions weighted by the genetic and linguistic distances (reported in Section 5.1 below) provide estimates of similar magnitude when higher weights are put on distant country-of-origin groups (Figure 3).

Alternative Geographical Units and Time Variation. As discussed in the data section, census tract data provide 5-year measures of the migrant share. Alternative estimations at the PUMA level provide a robustness check not only based on a more aggregated pattern of spatial variation but also with yearly variation in migration. Estimation results are provided in Table C5. We report the estimates for the main alternative specifications of the migration effect as well as the results for candidates versus propositions and for the specific types of propositions. Estimates based on this alternative data carry the same sign and significance levels as census-tract estimates. They convey that our main conclusions are stable and not conditioned by the level of analysis or the frequency of migration changes.

5 Heterogeneity analysis

We finally derive the heterogeneous effects of migration on electoral outcomes depending on natives' and immigrants' characteristics. We rely on summary statistics at the census-tract level as provided by the NHGIS, which include language ability, race, ethnicity and the distribution of countries of origin.

5.1 Immigrants' characteristics and assimilation

To refine our interpretation of the results, we first exploit the available information about migrants' individual and origin country characteristics. The degree of assimilation or the cultural proximity to the natives pertains to clear channels including group threat theory,

xenophobia, ethnic homophily and in-group bias (Luttmer, 2001). They explain why natives may feel threatened by migrants or refuse to contribute to the redistributive system and/or the provision of local public goods, as suggested previously.²⁷

Immigrants’ origin countries. We estimate heterogeneous effects of Mig_{ty} depending on cultural and economic distances between natives and immigrants from various origin countries. Following Alesina et al. (2016) and Docquier et al. (2020), we compute an augmented “Greenberg index”, which allows to over-weight immigrants from specific origin countries along several dimensions. It is written:

$$Mig_{ty}^A = \sum_i^I share_{ity} \times d_i \times e_{i,y} \quad (9)$$

and combines different standardized measures of cultural distance (d_i) and economic distance ($e_{i,y}$ between natives and immigrants from origin country i). Our time-invariant measures of cultural distance (d_i) include a dummy for *linguistic distance*, equal to zero if the US and the origin country have a common official language (Head et al., 2010), and data on *genetic distance* taken from Spolaore and Wacziarg (2009), which proxies cultural distance between origin immigrants of country i and US natives. We also compute our own measure of geodesic distance between the centroid of California and that of each country of origin. Regarding time-varying *economic distance* ($e_{i,y}$), we simply use the GDP per capita of immigrants’ origin country i at year y , taken from World Development Indicators and expressed in constant 2010 US\$. For each type of distance, we use standard logistic functions:

$$d_i = 2 / \left(1 + e^{-(\theta_1 * D_i^d)} \right) \quad (10)$$

$$e_{i,y} = 2 / \left(1 + e^{-(\theta_2 * D_{i,y}^e)} \right) \quad (11)$$

with factors θ_1 and θ_2 ranging between -10 and $+10$; D_i^d and $D_{i,y}^e$ standing for standardized cultural and economic distances respectively. When the two weights are equal to zero, Mig_{ty}^A corresponds to Mig_{ty} . When θ_1 increases, for a given θ_2 , the Greenberg index over-weights immigrants from culturally distant countries. When θ_2 increases, for a given θ_1 , it over-weights immigrants from richer origins. The different indices are normalized for all

²⁷For instance, recent papers including Mueller et al. (2017) and Steinmayr (2020), evidence that proximity between immigrants and natives is associated with a decrease in natives’ negative attitudes towards foreigners.

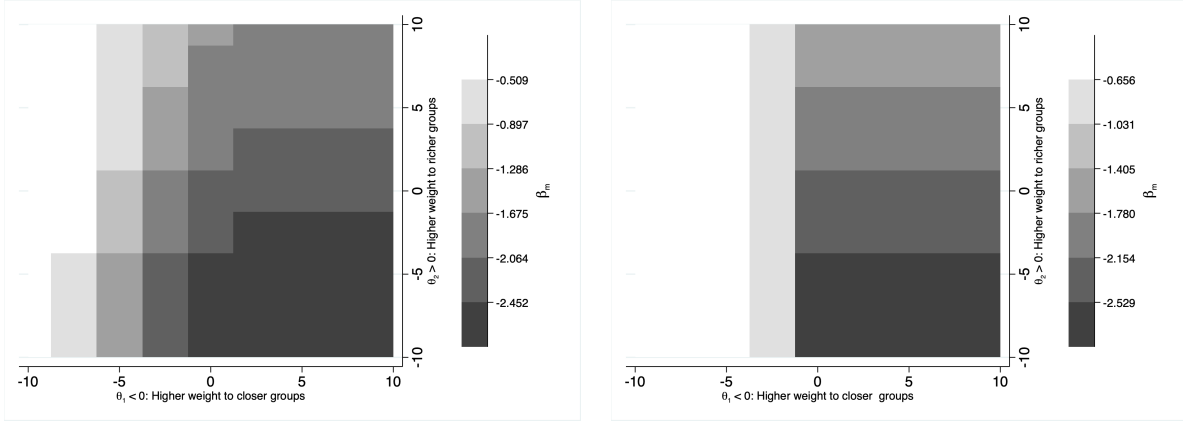
combinations of θ_1 and θ_2 to guarantee the comparability of the coefficients obtained in the different regressions.

Results are reported in Figure 3. The first and second graphs are based on genetic and linguistic distance respectively. Each cell represents the coefficient of interest obtained from a single regression with a particular combination of θ_1 (cultural distance varying on the horizontal axis) and θ_2 (economic distance varying vertically). Darker (lighter) cells correspond to a larger (smaller) effect of immigration on liberal candidates/measures, significant at the 5% level or below. Blank cells represent coefficients with a p-value above 5%. Moving South (East) on the graphs implies over-weighting migrants from poorer (genetically or culturally distant) countries of origin. We see that both moves contribute to a larger negative effect of migrants' share on liberal vote, suggesting that the conservative response to migration is enhanced when migrants are economically or culturally more dissimilar to natives. Note that for the physical distance (third graph), we exclude Mexico from the analysis as it is an obvious outlier. For completeness, we also present results for linguistic and genetic distances without Mexico in Figure C1 in the Appendix, which shows consistent patterns.

Immigrants' citizenship and language proficiency. While previous results were based on linguistic and cultural distance between migrants and natives, we can also run additional estimates while using information on migrants' citizenship and language ability to derive heterogeneous estimates. These dimensions may affect the likelihood of contacts with the natives and the risk of anti-foreigners attitudes.

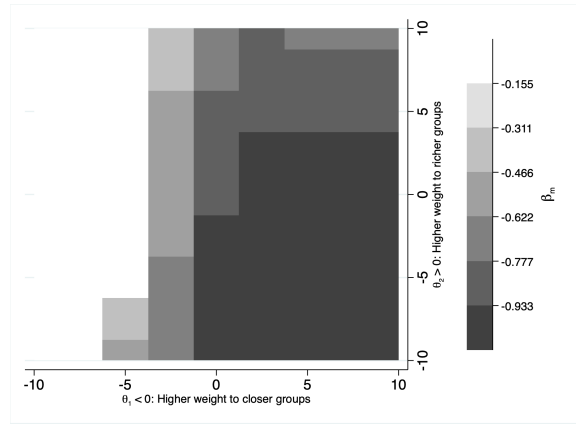
For confidentiality reasons, the NHGIS does not allow to merge all the migrants' characteristics together so that we use each one at a time. Results are reported in Table 4. Column (1) reproduces our baseline estimate. Column (2) shows that our main effect is essentially driven by non-citizens rather than naturalized immigrants. This result can be seen as reflecting lower degrees of assimilation among non-citizens. Note that the effect of an increase in the share of naturalized immigrants compounds different forces: a possibly higher degree of inclusion among natives, a mechanical downward effect on the dependent variable (since they contribute to an increase in the number of registered voters at the denominator) and a possibly lower political participation. Finally, according to column (3), the negative impact of immigration on electoral outcomes diminishes when migrants are more culturally assimilated, as measured by their degree of language proficiency (Chiswick and Miller, 2012, 2015). The coefficient of interest is five times higher for immigrants with a very low command of

Figure 3: Effect of Migrant Share on Electoral Outcome by Distance of Origin Country



(a) Genetic distance

(b) Linguistic distance



(c) Geodesic distance (excluding Mexico)

Notes: The share of immigrants is defined as the share of foreign born in the total resident population. Each squared cell represents one estimated coefficient for $Mig_{t,y}^A$, which itself corresponds to a particular combination of θ_1 and θ_2 in Eq. (10) and Eq. (11). All the $Mig_{t,y}^A$ obtained from different values of θ_1 and θ_2 are normalized such that the coefficients may be compared between each others. Blank squared cells represent insignificant coefficients at the 5% level. Each shaded cell corresponds to a significant coefficient at the 5% level, and darker cells mean larger estimated coefficients. All the specification include the full set of fixed effects with census tract and county-year fixed effects. Standards errors are clustered at the county level. Data on genetic distance are obtained from Spolaore and Wacziarg (2009). Data on linguistic and geodesic distance are obtained from Head et al. (2010). We use binary variable equal to zero for common official language and zero otherwise. All the distance measure are normalized between 0 and 1.

Source: Authors' elaboration on NGHIS and IGS data.

Table 4: Effect of Migrant Share on Electoral Outcome
by Immigrants' Individual Characteristics

	(1)	(2)	(3)
Mig_{ty}	-0.161*** (0.024)		
$Mig_{ty}^{Non\ Citizens}$		-0.223*** (0.033)	
$Mig_{ty}^{Naturalized}$		-0.049*** (0.014)	
<i>Ability to speak English:</i>			
Not well			-0.276*** (0.034)
Well			-0.151*** (0.044)
Very well			-0.057*** (0.018)
Census tract FE	✓	✓	✓
County × Year FE	✓	✓	✓
Nb. Observations	699,320	699,320	699,320
Nb. Propositions	54	54	54
Nb. Elec. Candidates	40	40	40
R^2	0.723	0.723	0.723

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). Mig_{ty} is the share of foreign born in the census tract resident population (aged 18 or more). Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration on NGHIS and IGS data.

English compared to individuals speaking English very well.

5.2 Natives' characteristics and the labor market

We finally exploit heterogeneity in residents' educational attainment combined with local labor market conditions. Note that the impact of immigration on labor markets at destination is still debated in the economic literature (Peri, 2016; Edo et al., 2018). What may matter the most for electoral outcomes is voters' perceptions about whether migrants pose a threat in terms of job opportunities and downward pressure on wages. As shown by Mayda (2006), these perceptions are very likely to be affected by natives' educational attainment.

We combine information on immigration and skill-specific local unemployment. Table 5 reports the results. In column (1), we first interact our variable of interest, Mig_{ty} , with the local unemployment rate. The latter is defined as the share of unemployed workers in the labor force of the census tract for the population aged 25 to 64. The median unemployment rate for our benchmark sample is 7.1%. The coefficient for the unemployment variable suggests that a rise in unemployment affects Democrat votes positively, possibly because of an increase demand in social policies and consistently with Brunner et al. (2011). The coefficient of the interaction term is negative and significant at the 1% level, suggesting that the depressing effect of immigration on liberal votes increases with unemployment. Most importantly, estimates in column (2) show that this heterogeneous effect is essentially due to unemployment among the low-skilled (LS).²⁸ This result is in line with the labor market competition motive highlighted by Mayda et al. (2019) in the US context. Estimates for propositions with possible implications for migrants (columns 4-6) are also consistent (and no effect is found for the placebo group of propositions, cf. column 7).

²⁸Moving from the 25th to the 75th percentile of the unemployment levels for LS leads to a 43% increase in the immigration effect (from -0.16 to -0.23). A similar variation regarding HS unemployment rates has hardly any effect (+4%).

Table 5: Effect of Migrant Share on Electoral Outcome by Unemployment Level for High and Low Skilled Workers

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All	All	Propositions only				
			All	Redistribution	Public Goods	Crime	Placebos
Mig_{ty}	-0.035 (0.032)	-0.053 (0.030)	-0.061* (0.030)	-0.102** (0.038)	-0.084** (0.036)	-0.055 (0.038)	0.005 (0.011)
Unemployment	0.321*** (0.042)						
$Mig_{it} \times$ Unemployment	-0.014*** (0.002)						
Unemployment LS		0.246*** (0.033)	0.207*** (0.031)	0.141*** (0.031)	0.237*** (0.036)	0.192*** (0.028)	0.004 (0.027)
$Mig_{it} \times$ Unemployment LS		-0.010*** (0.001)	-0.009*** (0.001)	-0.007*** (0.001)	-0.010*** (0.001)	-0.008*** (0.001)	-0.000 (0.001)
Unemployment HS		0.032** (0.017)	0.021 (0.016)	0.003 (0.021)	0.020 (0.019)	0.008 (0.020)	0.018 (0.011)
$Mig_{it} \times$ Unemployment HS		-0.001*** (0.000)	-0.001*** (0.000)	-0.000 (0.000)	-0.001** (0.000)	-0.000 (0.000)	-0.000* (0.000)
Census Tract FE	✓	✓	✓	✓	✓	✓	✓
County \times Year FE	✓	✓	✓	✓	✓	✓	✓
Nb. Observations	699,320	699,320	424,337	47,132	172,807	70,716	55,017
Nb. Elec. Candidates	40	40	0	0	0	0	0
Nb. Propositions	54	54	54	6	22	9	7
R^2	0.725	0.724	0.663	0.825	0.695	0.644	0.465

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). Mig_{ty} is the share of foreign born in the census tract resident population (aged 18 or more). Unemployment is defined as the share of unemployed in the total labor force aged 25 to 64 years old in the census tract. Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration on NGHS and IGS data.

6 Conclusions

This paper empirically investigates the impact of immigration on electoral outcomes at a very disaggregated level (census tract) in the context of California between 2010 and 2018. Taking advantage of the ballot system, which combines votes for representatives and for specific propositions during general elections, we show that migrant inflows decrease local support for liberal measures and candidates. The effect is substantial since a standard deviation increase in migrant shares is associated with a decrease of 11.5%-19.5% of a standard deviation

in Democrat votes. The lower bound is a conservative measure while the upper bound is obtained when controlling for migration-related changes in the electorate composition. The negative effect of immigration on liberal votes is magnified when immigrants originate from economically, culturally and genetically distant countries as well as when they are less assimilated in the native population, as measured by citizenship and their language ability.

The present paper complements the recent study of [Mayda et al. \(2019\)](#) about the US by focusing on California, a state of unique interest for its economic importance and its long history of immigration.²⁹ Most importantly, we can exploit the Californian system of direct democracy to link electoral outcomes to an array of topics that are central in the immigration debate (redistribution, public good, crime). Voters' intentions are elicited here through actual votes for liberal propositions rather than through subjective information in surveys, as in the existing literature. As a 'blue state', we expect most of the action to come from Democrat voters whose pro-migrant views may erode past a tipping point. In that sense, our results may be closer to evidence from Europe – rather than to the rest of the US – about declining supports to pro-migrant policies (e.g. [Alesina et al. 2019](#)). Nonetheless, the heterogeneity by skill levels goes in the same direction as what [Mayda et al. \(2019\)](#) indicate for the US overall: the drop in liberal support is larger in regions characterized by high unemployment among the low-skilled.

Several improvements can be suggested for future research. First, our results rely on specifications controlling for tract fixed effects that account for the long-term sorting of migrants throughout California and for county dynamics in terms of economic trends and social policies. We also provide results with standard shift-share instrumentation. However, more causal results could rely on exogenous shocks explaining why some localities receive more migrants at any given period, maybe by exploiting housing supply shocks. Another challenge is to explain the relative importance of the different motives underlying anti-migrant votes, which we could not do here because the different propositions corresponded to different ballots, making it difficult to compare the estimates for the different groups of propositions. Finally, our results are consistent whether we use votes for candidates or votes for propositions, which reinforce the classification procedure put in place for the political color of the

²⁹California is often considered as a country on its own, with 40 million inhabitants and the world's fifth largest economy (\$3.2 trillion gross state product in 2019). With 27% of foreign-born in its resident population in 2018, California is the first US state in terms of immigration.

propositions. New research could go further and attempt to integrate both types of vote by recovering information on the candidates' positions on the different pathways and, specifically, on the proposition topics used in the paper. In this way, it might be possible to check if voters who support a set of more anti-redistributive and tougher-on-crime policies also tend to vote for candidates that sustain these policies and are likely to implement them.

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Another Brick in the Wall. Immigration and Electoral Preferences: Direct Evidence from State Ballots.

Online Appendix.

1. Appendix A: Information on Californian Elections
2. Appendix B: Immigration data
3. Appendix C: Additional estimates and robustness checks
4. Appendix D (online): Alternative immigration indices
5. Appendix E (online): Information on ballot propositions
6. Appendix F (online): Additional descriptive statistics
7. Appendix G (online): Immigration and voter turnout

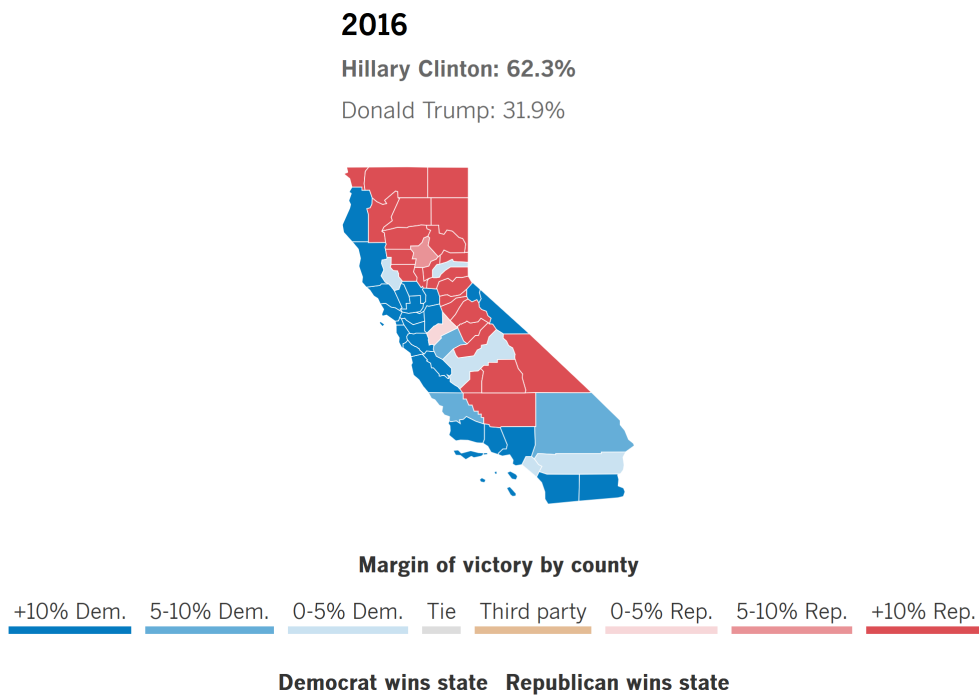
Appendix A: Information on Californian Elections

Table A1: California general elections, 2010-2018

Elections:	2010	2012	2014	2016	2018
State Assembly	✓	✓	✓	✓	✓
Attorney General	✓		✓		✓
Board of Equalization			✓		✓
House of Representative	✓	✓	✓	✓	✓
California State Controller	✓		✓		✓
Governor	✓		✓		✓
Insurance Commissioner	✓		✓		
Lieutenant Governor	✓		✓		
President		✓		✓	
Senator	✓	✓	✓	✓	✓
Secretary of State	✓		✓		✓
State Treasurer	✓		✓		✓
United States Senate	✓	✓			
Number of propositions	9	11	6	17	11

Source: Authors' elaboration on IGS data.

Figure A1: Share of votes cast at recent presidential elections in the 2016 presidential election



Source: California Statewide Database.

Appendix B: Immigration data

Table B1: Summary statistics (2010-2018)

	Mean	Sd. Dev.	10 th per.	90 th per.
Migrant share <i>Mig_{ty}</i> (All)	0.269	0.142	0.099	0.468
<i>Citizenship</i> (All):				
Non citizens	0.492	0.175	0.265	0.731
Naturalized	0.508	0.175	0.269	0.735
<i>Speak English</i> (5+):				
Not well	0.293	0.175	0.077	0.542
Well	0.213	0.065	0.128	0.292
Very well	0.490	0.188	0.245	0.746
<i>Origins</i> (All):				
Africa	0.020	0.032	0.000	0.053
Americas	0.517	0.291	0.137	0.933
Asia	0.352	0.247	0.039	0.714
Europe	0.102	0.117	0.003	0.270
Oceania	0.010	0.021	0.000	0.028

Note: *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 or more). Other variables are expressed as a percentage of the total migrant population. 10th per. and 90th per. are the values of the 10th and 90th percentiles, respectively. Source: Authors' elaboration on NHGIS data.

Appendix C: Additional estimates and robustness checks

Table C1: Effect of Migrant Share on Electoral Outcome, Vote fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mig_{ty}</i>	0.094*** (0.026)	-0.220*** (0.042)	-0.162*** (0.025)	-0.160*** (0.026)	-0.156*** (0.023)	-0.141*** (0.022)
Vote FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓				
Census tract FE		✓	✓	✓	✓	✓
County × Year FE			✓		✓	✓
County × linear time trend				✓		
Economic controls					✓	
Voting Pop. Weights						✓
Nb. Observations	699,320	699,320	699,320	699,320	699,320	699,320
Nb. Propositions	54	54	54	54	54	54
Nb. Elec. Candidates	40	40	40	40	40	40
<i>R</i> ²	0.729	0.862	0.883	0.872	0.884	0.882

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 or more). Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Observations in column (6) are weighted by the voting population in the tract. Source: Authors' elaboration on NGHIS and IGS data.

Table C2: Effect of Migrant Share on Electoral Outcome, Propositions only

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mig_{ty}</i>	0.060*** (0.018)	-0.209*** (0.042)	-0.152*** (0.026)	-0.147*** (0.030)	-0.146*** (0.024)	-0.129*** (0.022)
Year FE	✓	✓				
Census tract FE		✓	✓	✓	✓	✓
County × Year FE			✓		✓	✓
County × linear time trend				✓		
Economic controls					✓	
Voting Pop. Weights						✓
Nb. Observations	424,337	424,337	424,337	424,337	424,337	424,337
Nb. Propositions	54	54	54	54	54	54
Nb. Elec. Candidates	0	0	0	0	0	0
<i>R</i> ²	0.555	0.645	0.662	0.471	0.663	0.653

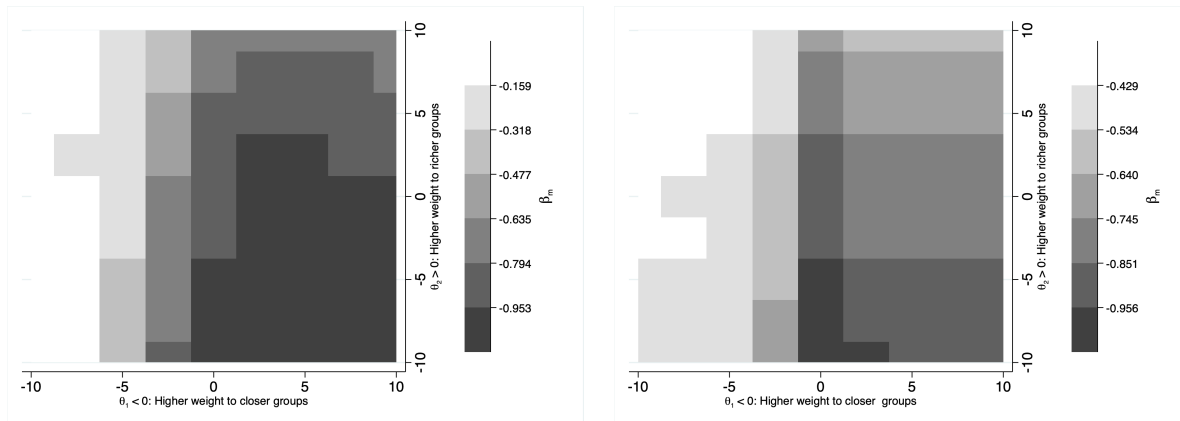
Note: The dependent variable is the tract-level share of registered voters in favor of a proposition if this latter has been classified as “liberal” or the share of voters against the proposition if it has been classified as “conservative”, following Brunner et al. (2011). *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 and more). Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Observations in column (6) are weighted by the voting population in the tract. Source: Authors’ elaboration on NGHIS and IGS data.

Table C3: Effect of Migrant Share on Electoral Outcome, Candidates only

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Mig_{ty}</i>	0.148*** (0.037)	-0.258*** (0.052)	-0.198*** (0.029)	-0.187*** (0.031)	-0.192*** (0.027)	-0.176*** (0.028)
Year FE	✓	✓				
Census tract FE		✓	✓	✓	✓	✓
County × Year FE			✓		✓	✓
County × linear time trend				✓		
Economic controls					✓	
Voting Pop. Weights						✓
Nb. Observations	274,983	274,982	274,982	274,982	274,982	274,982
Nb. Propositions	0	0	0	0	0	0
Nb. Elec. Candidates	40	40	40	40	40	40
<i>R</i> ²	0.663	0.883	0.919	0.589	0.920	0.920

Note: The dependent variable is the share of registered voters opting for a candidate officially affiliated to the Democratic party. *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 and more). Standard errors are clustered at the county level reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Observations in column (6) are weighted by the voting population in the tract. Source: Authors' elaboration on NGHIS and IGS data.

Figure C1: Heterogeneous Effect of Migrant Share on Electoral Outcome by Distance of Origin Country, Excluding Mexico



(a) Genetic distance

(b) Linguistic distance

Notes: The share of immigrants is defined as in Eq. (9). Each squared cell represents one estimated coefficient for $Mig_{t,y}^A$, which itself corresponds to a particular combination of θ_1 and θ_2 in Eq. (10) and Eq. (11). All the $Mig_{t,y}^A$ obtained from different values of θ_1 and θ_2 are normalized such that the coefficients may be compared between each others. Blank squared cells represent insignificant coefficients at the 5% level. Each shaded cell corresponds to a significant coefficient at the 5% level, and darker cells mean larger estimated coefficients. All the specification include the full set of fixed effects with census tract and county-year fixed effects. Standards errors are clustered at the county level. Data on genetic distance are obtained from Spolaore and Wacziarg (2009). Data on linguistic distance are obtained from Head et al. (2010). We use binary variable equal to zero for common official language and zero otherwise. All distance measures are normalized between 0 and 1. Source: Authors' elaboration on NGHIS and IGS data.

Table C4: IV-2SLS Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	All	All	Elec. Cand.	Prop.	Redistribution	Public Goods	Crime	Placebos
<i>Migt_{ty}</i>	-2.606*** (0.255)	-3.305*** (0.210)	-3.096*** (0.297)	-2.502*** (0.224)	-2.681*** (0.294)	-2.872*** (0.271)	-3.251*** (0.471)	0.033 (0.219)
Census Tract FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County × Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Economic controls	No	Yes	No	No	No	No	No	No
Ethnic composition	No	Yes	No	No	No	No	No	No
Voter turnout	No	No	Yes	No	No	No	No	No
Nb. Observations	698,552	698,552	274,680	423,871	47,082	17,2615	70,639	54,961
Nb. Propositions	54	54	0	54	6	22	9	7
Nb. Elec. Candidates	40	40	40	0	0	0	0	0
KP-Test	189.464	339.563	203.783	183.703	185.347	209.183	87.943	89.299

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). *Migt_{ty}* is the share of foreign born in the census tract resident population (aged 18 or more). Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Ethnic composition is the minority share (residents who are not non-hispanic whites), purged from its effect on the share of foreign born in the tract. Voter turnout is calculated as the proportion of participants at each vote in the overall citizen population (voting age population comprising natives and naturalized immigrants). Standard errors clustered at the tract level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration on NGHIS and IGS data.

Table C5: Baseline Estimates at the PUMA level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	All	All	All	Elec. Cand.	Prop.	Redistribution	Public Goods	Crime	Placebos
<i>Migt_{ty}</i>	-0.236*** (0.063)	-0.191*** (0.060)	-0.257*** (0.077)	-0.263*** (0.093)	-0.214*** (0.053)	-0.242*** (0.066)	-0.266*** (0.067)	-0.169** (0.074)	-0.006 (0.048)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PUMA FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Economic controls	No	Yes	No	No	No	No	No	No	No
Ethnic composition	No	No	Yes	No	No	No	No	No	No
Voter turnout	No	No	Yes	No	No	No	No	No	No
Nb. Observations	23,407	23,407	23,407	9,205	14,202	1,578	5,786	2,367	1,841
Nb. Propositions	54	54	54	0	54	6	22	9	7
Nb. Elec. Candidates	35	35	35	35	0	0	0	0	0
Adjusted <i>R</i> ²	0.710	0.712	0.714	0.890	0.650	0.788	0.667	0.575	0.304

Note: The dependent variable is the PUMA-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following Brunner et al. (2011)). *Migt_{ty}* is the share of foreign born in the PUMA resident population (aged 18 or more). Economic controls include unemployment rates of the working age population as well as median earning over the last 12 months (inflation-adjusted) for low-skilled and high-skilled residents respectively. Ethnic composition is the minority share (residents who are not non-hispanic whites), purged from its effect on the share of foreign born in the PUMA. Voter turnout is calculated as the proportion of participants at each vote in the overall citizen population (voting age population comprising natives and naturalized immigrants). Standard errors clustered at the PUMA level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration on NGHIS and IGS data.

Appendix D: Alternative immigration indices

We test the robustness of our results to alternative measure of immigration.³⁰ More precisely, we replace our measure of the share of immigrants in the total resident population with alternative measures of diversity. *First*, we use is an Herfindahl–Hirschman index of birthplace diversity Div_{ty} which measures the probability that two randomly drawn residents (including natives) from tract t originate from two different countries of birth. It is computed as:

$$Div_{ty} = \sum_i^I share_{ity}(1 - share_{ity}) \quad (12)$$

where $share_{ity}$ is the total number of residents born in country i in the total resident population of tract t . As shown by [Docquier et al. \(2020\)](#) the correlation between Div_{ty} and Mig_{ty} is very high and equal to 0.94 in our sample. *Second*, we use a simpler index of diversity, namely a country count index that simply sum the number of different birthplace recorded in a given tract-year. Conversely to the Herfindahl–Hirschman, this measure does not take into account the size of each group. The correlation between Mig_{ty} and the country count index is 0.07. *Third*, we take advantage of a polarization index, a measure that have been use by [Ager and Brückner \(2013\)](#); [Montalvo and Reynal-Querol \(2005\)](#). The latter captures how far the distribution of a population is from the bimodal distribution. It is maximized when a given census tract only contains two origins (including natives) which are equal size. It is defined as :

$$Pol_{ty} = 1 - \sum_{i=1}^I ((0.5 - share_{ity})/0.5)^2 share_{ity} \quad (13)$$

The correlation with Mig_{ty} index is equal to 0.85. *Fourth*, we take advantage of a Theil index as an alternative measure of the size of immigration in each tract. For a given year and tract it si computed as:

$$Theil = \frac{1}{I} \sum_{i=1}^I \frac{x_i}{\mu} \ln \left(\frac{x_i}{\mu} \right)$$

where:

$$\mu = \frac{1}{I} \sum_{i=1}^I x_i$$

³⁰As in our benchmark specification, all indices are computed for the voting age population only.

where x_i is the stock of residents born in country i and I represents the number of different origins. Unlike, the previous index, the Theil index has the advantage that it can be decomposed into two additive components: a within-origin component that captures changes in the concentration of residents at the intensive margin, and a between-origin component that captures changes in the concentration of residents at the extensive margin as underlined by Cadot et al. (2011).³¹ The correlation between our variable of interest and the Theil index are -0.76, -0.06 and -0.67 for the baseline, the between and the within component respectively.

Table D1: Alternative measures of immigration

$X \rightarrow$	(1) <i>Mig_{ty}</i>	(2) Diversity	(3) Country count	(4) Polar	(5) Theil	(6) Theil (Between)	(7) Theil (Within)
X	-0.161*** (0.024)	-7.714*** (1.122)	-0.022 (0.015)	-6.918*** (0.891)	2.072*** (0.328)	-0.120 (0.302)	1.113** (0.484)
Corr(<i>Mig_{ty}</i> ; X)	1.000	0.941	0.07	0.854	-0.758	-0.055	-0.665
Census Tract FE	✓	✓	✓	✓	✓	✓	✓
County \times Year FE	✓	✓	✓	✓	✓	✓	✓
Nb. of Observations	699,320	699,320	699,320	699,320	699,320	699,320	699,320
Nb. Propositions	54	54	54	54	54	54	54
Nb. Elec. Candidates	40	40	40	40	40	40	40
R^2	0.723	0.722	0.722	0.722	0.722	0.722	0.722

Note: The dependent variable is the tract-level Democratic vote share (i.e. the share of registered voters opting for a Democrat candidate or in favor/against a proposition classified as liberal/conservative following (Brunner et al., 2011)). *Mig_{ty}* is the share of foreign born in the census tract resident population (aged 18 and more) (column 1) or alternative immigration indices as defined in the main text. Standard errors clustered at the county level are reported in parentheses; *** p<0.01, ** p<0.05, * p<0.1. Source: Authors' elaboration on NGHIS and IGS data.

³¹See Cadot et al. (2011) for the within and between equations.

Appendix E: Information on ballot propositions

Figure E1: Extract of Proposition 30 from the Official Voter Information Guide. Californian General Election, Tuesday, November 6, 2012

Election FEs

PROPOSITION 30 **TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.** ← **Title**

OFFICIAL TITLE AND SUMMARY PREPARED BY THE ATTORNEY GENERAL

TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.

- Increases personal income tax on annual earnings over \$250,000 for seven years.
- Increases sales and use tax by ¼ cent for four years.
- Allocates temporary tax revenues 89% to K-12 schools and 11% to community colleges.
- Bars use of funds for administrative costs, but provides local school governing boards discretion to decide, in open meetings and subject to annual audit, how funds are to be spent.
- Guarantees funding for public safety services realigned from state to local governments.

Summary of Legislative Analyst's Estimate of Net State and Local Government Fiscal Impact:

- Additional state tax revenues of about \$6 billion annually from 2012-13 through 2016-17. Smaller amounts of additional revenue would be available in 2011-12, 2017-18, and 2018-19.
- These additional revenues would be available to fund programs in the state budget. Spending reductions of about \$6 billion in 2012-13, mainly to education programs, would not take effect.

↑ **Summary** ↑ **Fiscal Impact**

Table E1: California ballot propositions, 2010-2018

Proposition	Short description	Liberal
1	Water Bond. Funding for Water Quality, Supply, Treatment, and Storage Projects.	Yes
2	State Budget. Budget Stabilization Account.	No
19	Changes California Law to Legalize Marijuana and Allow It to Be Regulated and Taxed.	Yes
20	Redistricting of Congressional Districts. Initiative Constitutional Amendment.	No
21	Establishes \$18 Annual Vehicle License Surcharge to Help Fund State Parks and Wildlife Programs and Grants Free Admission to All State Parks to Surcharged Vehicles.	Yes
22	Prohibits the State from Taking Funds Used for Transportation or Local Government Projects and Services. Initiative Constitutional Amendment.	No
23	Suspends Implementation of Air Pollution Control Law (AB 32) Requiring Major Sources of Emissions to Report and Reduce Greenhouse Gas Emissions That Cause Global Warming, Until Unemployment Drops to 5.5 Percent or Less for Full Year.	No
24	Repeals Recent Legislation that Would Allow Businesses to Lower Their Tax Liability. Initiative Statute.	Yes
25	Changes Legislative Vote Requirement to Pass a Budget from Two-Thirds to a Simple Majority. Retains Two-Thirds Vote Requirement for Taxes. Initiative Constitutional Amendment.	Yes
26	Requires that Certain State and Local Fees Be Approved by Two-Thirds Vote. Fees Include Those that Address Adverse Impacts on Society or the Environment Caused by Fee-Payer's Business. Initiative Constitutional Amendment.	No
27	Eliminates State Commission on Redistricting. Consolidates Authority for Redistricting with Elected Representatives. Initiative Constitutional Amendment and Statute.	Yes
31	State Budget. State and Local Government. Initiative Constitutional Amendment and Statute.	No
32	Prohibits Political Contributions by Payroll Deduction. Prohibitions on Contributions to Candidates. Initiative Statute.	No
33	Changes Law to Allow Auto Insurance Companies to Set Prices Based on a Driver's History of Insurance Coverage. Initiative Statute.	No
34	Death Penalty Repeal. Initiative Statute.	Yes
35	Human Trafficking. Penalties. Sex Offender Registration. Initiative Statute.	No
36	Three Strikes Law. Sentencing for Repeat Felony Offenders. Initiative Statute.	Yes
37	Genetically Engineered Foods. Mandatory Labeling. Initiative Statute.	Yes
38	Tax for Education and Early Childhood Programs. Initiative Statute.	Yes
39	Tax Treatment for Multistate Businesses. Clean Energy and Energy Efficiency Funding. Initiative Statute.	Yes
40	Redistricting. State Senate Districts. Referendum.	No
45	Approval of Healthcare Insurance Rate Changes	Yes
46	Drug and Alcohol Testing of Doctors. Medical Negligence Lawsuits.	Yes
47	Criminal Sentences. Misdemeanor Penalties.	Yes
48	Referendum to Overturn Indian Gaming Compacts	Yes
51	Kindergarten through Community College Public Education Facilities Bond Act	Yes
52	State Fees on Hospitals Federal Medi-Cal Matching Funds	Yes
53	No Blank Checks Initiative	No
54	Legislative Transparency Act	No
55	Extension of Temporary Personal Income Tax Increase Amendment	Yes
56	Cigarette Tax Increase Amendment	Yes
57	Prison Sentence Reform Amendment	Yes
58	English Language Education	Yes
59	Overturn Citizens United Act	Yes
60	California Safer Sex in the Adult Film Industry Act	Yes
61	California Drug Price Relief Act	Yes

Source: Author's elaboration on IGS data.

Table E2: California ballot propositions, 2010-2018 (cont'd)

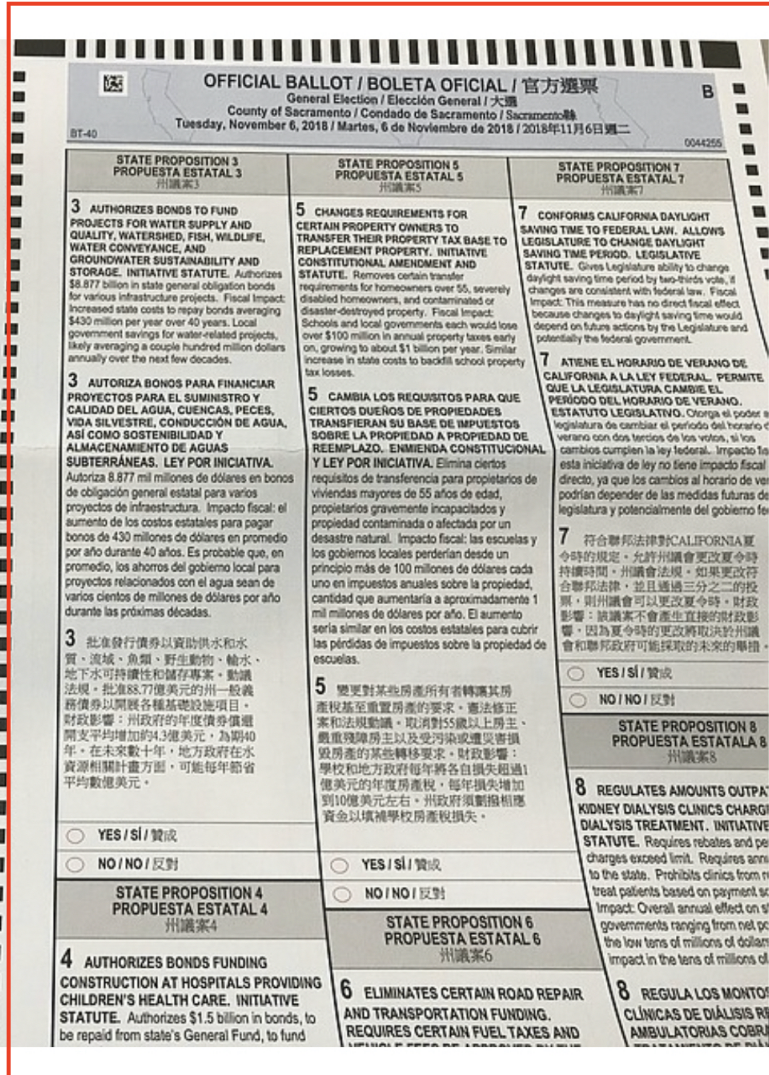
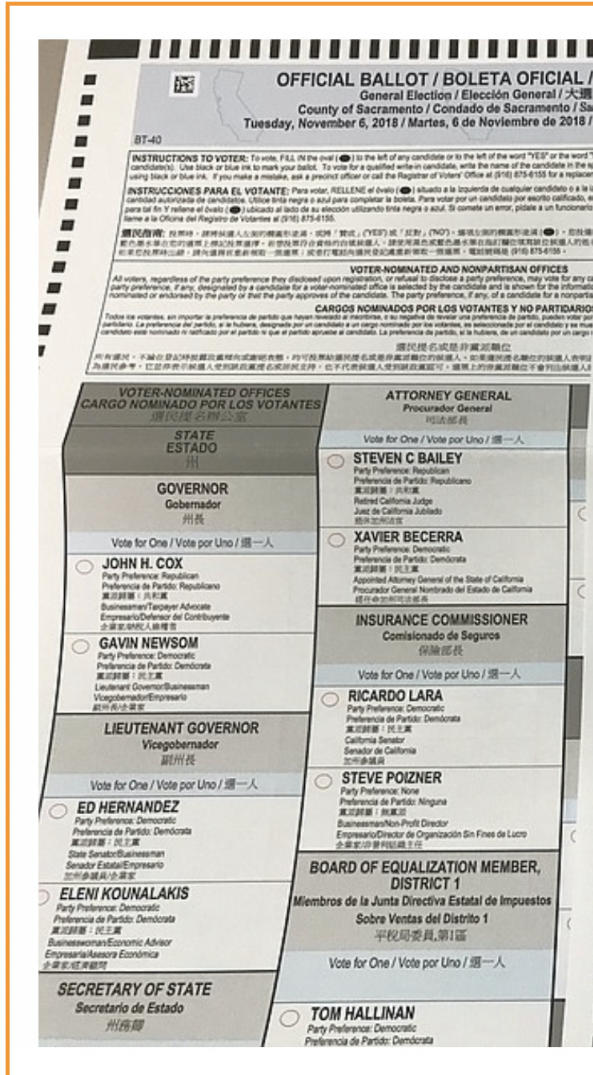
Proposition	Short description	Liberal
62	Justice That Works Act (Capital Punishment)	Yes
63	Safety For All Act	Yes
64	Legalization of Marijuana for Adults Over 21	Yes
65	Environmental Fund from Reusable Bag Fees	Yes
66	Death Penalty Revision	No
67	Referendum to Overturn Ban on Single-Use Plastic Bags	Yes
1	Veterans and Affordable Housing Bond Act	Yes
2	Application of Existing 1 Percent Tax on Incomes over One Million Dollars to Homelessness Prevention Bonds	Yes
3	Water Infrastructure, Supply and Watershed Protection Bond Initiative	Yes
4	Bonds for Children's Hospitals Initiative	Yes
5	Decreasing Property Taxes for New Home Purchases by Homebuyers 55 and Older Amendment and Initiative	No
6	Repeal of 2017 Gas Tax and Voter Approval of Future Gas Tax Increases Initiative	No
7	Allowing Legislature to Enact Permanent Daylight Saving Time If Allowed by Federal Law Measure	No
8	Limiting Dialysis Revenue and Requiring Refund to Patients or Insurers Initiative	Yes
10	Repeal of Costa-Hawkins Rental Housing Act and Allow Local Rent Control Initiative	Yes
11	Ambulance Employees to Receive Paid On-Call Breaks and Additional Training Initiative	No
12	Expand Required Number of Square Feet for Farm Animal Production Initiative	Yes

Source: Author's elaboration on IGS data.

Figure E2: General elections example

Elections for candidates

Ballot propositions



QUICK-REFERENCE GUIDE

PROP 30 TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.

SUMMARY

Put on the Ballot by Petition Signatures

Increases taxes on earnings over \$250,000 for seven years and sales taxes by ¼ cent for four years, to fund schools. Guarantees public safety realignment funding. Fiscal Impact: Increased state tax revenues through 2018–19, averaging about \$6 billion annually over the next few years. Revenues available for funding state budget. In 2012–13, planned spending reductions, primarily to education programs, would not occur.

WHAT YOUR VOTE MEANS

YES A YES vote on this measure means: The state would increase personal income taxes on high-income taxpayers for seven years and sales taxes for four years. The new tax revenues would be available to fund programs in the state budget.

NO A NO vote on this measure means: The state would not increase personal income taxes or sales taxes. State spending reductions, primarily to education programs, would take effect in 2012–13.

ARGUMENTS

PRO After years of cuts to schools and public safety, it's time to take a stand. Prop. 30 asks the wealthiest to temporarily pay more to prevent deep school cuts, provide billions in new education funding, guarantee local public safety and help balance the state budget. Learn more at YesOnProp30.com.

CON NO on 30—\$50 billion in higher sales and income taxes, but no guarantee of additional money for schools. Prop. 30 doesn't reform schools, pensions or cut waste and bureaucracy. We'll never know where the money really goes. Educators, small businesses and taxpayer groups say NO on 30.

FOR ADDITIONAL INFORMATION

FOR

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AGAINST

No on 30—Californians for
Reforms and Jobs, Not Taxes
925 University Avenue
Sacramento, CA 95825
(866) 955-5508
info@stopprop30.com
www.StopProp30.com

PROPOSITION 30 TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.

OFFICIAL TITLE AND SUMMARY

PREPARED BY THE ATTORNEY GENERAL

TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.

- Increases personal income tax on annual earnings over \$250,000 for seven years.
- Increases sales and use tax by ¼ cent for four years.
- Allocates temporary tax revenues 89% to K–12 schools and 11% to community colleges.
- Bars use of funds for administrative costs, but provides local school governing boards discretion to decide, in open meetings and subject to annual audit, how funds are to be spent.
- Guarantees funding for public safety services realigned from state to local governments.

Summary of Legislative Analyst's Estimate of Net State and Local Government Fiscal Impact:

- Additional state tax revenues of about \$6 billion annually from 2012–13 through 2016–17. Smaller amounts of additional revenue would be available in 2011–12, 2017–18, and 2018–19.
- These additional revenues would be available to fund programs in the state budget. Spending reductions of about \$6 billion in 2012–13, mainly to education programs, would not take effect.

ANALYSIS BY THE LEGISLATIVE ANALYST

OVERVIEW

This measure temporarily increases the state sales tax rate for all taxpayers and the personal income tax (PIT) rates for upper-income taxpayers. These temporary tax increases provide additional revenues to pay for programs funded in the state budget. The state's 2012–13 budget plan—approved by the Legislature and the Governor in June 2012—assumes

passage of this measure. The budget, however, also includes a backup plan that requires spending reductions (known as “trigger cuts”) in the event that voters reject this measure. This measure also places into the State Constitution certain requirements related to the recent transfer of some state program responsibilities to local governments. Figure 1 summarizes the main provisions of this proposition, which are discussed in more detail below.

Figure 1
Overview of Proposition 30

State Taxes and Revenues

- Increases sales tax rate by one-quarter cent for every dollar for four years.
- Increases personal income tax rates on upper-income taxpayers for seven years.
- Raises about \$6 billion in additional annual state revenues from 2012–13 through 2016–17, with smaller amounts in 2011–12, 2017–18, and 2018–19.

State Spending

- If approved by voters, additional revenues available to help balance state budget through 2018–19.
- If rejected by voters, 2012–13 budget reduced by \$6 billion. State revenues lower through 2018–19.

Local Government Programs

- Guarantees local governments receive tax revenues annually to fund program responsibilities transferred to them by the state in 2011.

PROPOSITION 30 TEMPORARY TAXES TO FUND EDUCATION. GUARANTEED LOCAL PUBLIC SAFETY FUNDING. INITIATIVE CONSTITUTIONAL AMENDMENT.

ANALYSIS BY THE LEGISLATIVE ANALYST

CONTINUED

STATE TAXES AND REVENUES

Background

The General Fund is the state's main operating account. In the 2010–11 fiscal year (which ran from July 1, 2010 to June 30, 2011), the General Fund's total revenues were \$93 billion. The General Fund's three largest revenue sources are the PIT, the sales tax, and the corporate income tax.

Sales Tax. Sales tax rates in California differ by locality. Currently, the average sales tax rate is just over 8 percent. A portion of sales tax revenues goes to the state, while the rest is allocated to local governments. The state General Fund received \$27 billion of sales tax revenues during the 2010–11 fiscal year.

Personal Income Tax. The PIT is a tax on wage, business, investment, and other income of individuals and families. State PIT rates range from 1 percent to 9.3 percent on the portions of a taxpayer's income in each of several income brackets. (These are referred to as marginal tax rates.) Higher marginal tax rates are charged as income increases. The tax revenue generated from this tax—totaling \$49.4 billion during the 2010–11 fiscal year—is deposited into the state's General Fund. In addition, an extra 1 percent tax applies to annual income over \$1 million (with the associated revenue dedicated to mental health services).

Proposal

Increases Sales Tax Rate From 2013 Through 2016. This measure temporarily increases the statewide sales tax rate by one-quarter cent for every dollar of goods purchased. This higher tax rate would be in effect for four years—from January 1, 2013 through the end of 2016.

Increases Personal Income Tax Rates From 2012 Through 2018. As shown in Figure 2, this measure increases the existing 9.3 percent PIT rates on higher incomes. The additional marginal tax rates would increase as taxable income increases. For joint filers, for example, an additional 1 percent marginal tax rate would be imposed on income between \$500,000 and \$600,000 per year, increasing the total rate to 10.3 percent. Similarly, an additional 2 percent marginal tax rate would be imposed on income between \$600,000 and \$1 million, and an additional 3 percent marginal tax rate would be imposed on income above \$1 million, increasing the total rates on these income brackets to 11.3 percent and 12.3 percent, respectively. These new tax rates would affect about 1 percent of California PIT filers. (These taxpayers currently pay about 40 percent of state personal income taxes.) The tax rates would be in effect for seven years—

Figure 2
Current and Proposed Personal Income Tax Rates Under Proposition 30

Single Filer's Taxable Income ^a	Joint Filers' Taxable Income ^a	Head-of-Household Filer's Taxable Income ^a	Current Marginal Tax Rate ^b	Proposed Additional Marginal Tax Rate ^b
\$0–\$7,316	\$0–\$14,632	\$0–\$14,642	1.0%	—
7,316–17,346	14,632–34,692	14,642–34,692	2.0	—
17,346–27,377	34,692–54,754	34,692–44,721	4.0	—
27,377–38,004	54,754–76,008	44,721–55,348	6.0	—
38,004–48,029	76,008–96,058	55,348–65,376	8.0	—
48,029–250,000	96,058–500,000	65,376–340,000	9.3	—
250,000–300,000	500,000–600,000	340,000–408,000	9.3	1.0%
300,000–500,000	600,000–1,000,000	408,000–680,000	9.3	2.0
Over 500,000	Over 1,000,000	Over 680,000	9.3	3.0

^a Income brackets shown were in effect for 2011 and will be adjusted for inflation in future years. Single filers also include married individuals and registered domestic partners (RDPs) who file taxes separately. Joint filers include married and RDP couples who file jointly, as well as qualified widows or widowers with a dependent child.

^b Marginal tax rates apply to taxable income in each tax bracket listed. The proposed additional tax rates would take effect beginning in 2012 and end in 2018. Current tax rates listed exclude the mental health tax rate of 1 percent for taxable income in excess of \$1 million.

starting in the 2012 tax year and ending at the conclusion of the 2018 tax year. (Because the rate increase would apply as of January 1, 2012, affected taxpayers likely would have to make larger payments in the coming months to account for the full-year effect of the rate increase.) The additional 1 percent rate for mental health services would still apply to income in excess of \$1 million. Proposition 30's rate changes, therefore, would increase these taxpayers' marginal PIT rate from 10.3 percent to 13.3 percent. Proposition 38 on this ballot would also increase PIT rates. The nearby box describes what would happen if both measures are approved.

What Happens if Voters Approve Both Proposition 30 and Proposition 38?

State Constitution Specifies What Happens if Two Measures Conflict. If provisions of two measures approved on the same statewide ballot conflict, the Constitution specifies that the provisions of the measure receiving more "yes" votes prevail. Proposition 30 and Proposition 38 on this statewide ballot both increase personal income tax (PIT) rates and, as such, could be viewed as conflicting.

Measures State That Only One Set of Tax Increases Goes Into Effect. Proposition 30 and Proposition 38 both contain sections intended to clarify which provisions are to become effective if both measures pass:

- **If Proposition 30 Receives More Yes Votes.** Proposition 30 contains a section indicating that its provisions would prevail in their entirety and none of the provisions of any other measure increasing PIT rates—in this case Proposition 38—would go into effect.
- **If Proposition 38 Receives More Yes Votes.** Proposition 38 contains a section indicating that its provisions would prevail and the tax rate provisions of any other measure affecting sales or PIT rates—in this case Proposition 30—would not go into effect. Under this scenario, the spending reductions known as the "trigger cuts" would take effect as a result of Proposition 30's tax increases not going into effect.

Fiscal Effect

Additional State Revenues Through 2018–19. Over the five fiscal years in which both the sales tax and PIT increases would be in effect (2012–13 through 2016–17), the average annual state revenue gain resulting from this measure's tax increases is estimated at around \$6 billion. Smaller revenue increases are likely in 2011–12, 2017–18, and 2018–19 due to the phasing in and phasing out of the higher tax rates.

Revenues Could Change Significantly From Year to Year. The revenues raised by this measure could be subject to multibillion-dollar swings—either above or below the revenues projected above. This is because the vast majority of the additional revenue from this measure would come from the PIT rate increases on upper-income taxpayers. Most income reported by upper-income taxpayers is related in some way to their investments and businesses, rather than wages and salaries. While wages and salaries for upper-income taxpayers fluctuate to some extent, their investment income may change significantly from one year to the next depending upon the performance of the stock market, housing prices, and the economy. For example, the current mental health tax on income over \$1 million generated about \$730 million in 2009–10 but raised more than twice that amount in previous years. Due to these swings in the income of these taxpayers and the uncertainty of their responses to the rate increases, the revenues raised by this measure are difficult to estimate.

STATE SPENDING

Background

State General Fund Supports Many Public Programs. Revenues deposited into the General Fund support a variety of programs—including public schools, public universities, health programs, social services, and prisons. School spending is the largest part of the state budget. Earlier propositions passed by state voters require the state to provide a minimum annual amount—commonly called the Proposition 98 minimum guarantee—for schools (kindergarten through high school) and community colleges (together referred to as K–14 education). The minimum guarantee is funded through a combination of state General Fund and local property tax revenues. In many years, the calculation of the minimum guarantee is highly sensitive to changes in state General Fund revenues. In years when General Fund revenues grow by a large amount, the guarantee is likely to increase by a large amount. A large share of the state and local funding that is allocated to schools and community colleges is "unrestricted," meaning that they may use the funds for any educational purpose.

Proposal

New Tax Revenues Available to Fund Schools and Help Balance the Budget. The revenue generated by the measure's temporary tax increases would be included in the calculations of the Proposition 98 minimum guarantee—raising the guarantee by billions of dollars each year. A portion of the new revenues therefore would be used to support higher school funding, with the remainder helping

to balance the state budget. From an accounting perspective, the new revenues would be deposited into a newly created state account called the Education Protection Account (EPA). Of the funds in the account, 89 percent would be provided to schools and 11 percent to community colleges. Schools and community colleges could use these funds for any educational purpose. The funds would be distributed the same way as existing unrestricted per-student funding, except that no school district would receive less than \$200 in EPA funds per student and no community college district would receive less than \$100 in EPA funds per full-time student.

Fiscal Effect if Measure Is Approved

2012–13 Budget Plan Relies on Voter Approval of This Measure. The Legislature and the Governor adopted a budget plan in June to address a substantial projected budget deficit for the 2012–13 fiscal year as well as projected budget deficits in future years. The 2012–13 budget plan (1) assumes that voters approve this measure and (2) spends the resulting revenues on various state programs. A large share of the revenues generated by this measure is spent on schools and community colleges. This helps explain the large increase in funding for schools and community colleges in 2012–13—a \$6.6 billion increase (14 percent) over 2011–12. Almost all of this increase is used to pay K–14 expenses from the previous year and

reduce delays in some state K–14 payments. Given the large projected budget deficit, the budget plan also includes actions to constrain spending in some health and social services programs, decrease state employee compensation, use one-time funds, and borrow from other state accounts.

Effect on Budgets Through 2018–19. This measure's additional tax revenues would be available to help balance the state budget through 2018–19. The additional revenues from this measure provide several billion dollars annually through 2018–19 that would be available for a wide range of purposes—including funding existing state programs, ending K–14 education payment delays, and paying other state debts. Future actions of the Legislature and the Governor would determine the use of these funds. At the same time, due to swings in the income of upper-income taxpayers, potential state revenue fluctuations under this measure could complicate state budgeting in some years. After the proposed tax increases expire, the loss of the associated tax revenues could create additional budget pressure in subsequent years.

Fiscal Effect if Measure Is Rejected

Backup Budget Plan Reduces Spending if Voters Reject This Measure. If this measure fails, the state would not receive the additional revenues generated by the proposition's tax increases. In this situation, the 2012–13 budget plan requires that its spending be reduced by \$6 billion. These trigger cuts, as currently scheduled in state law, are shown in Figure 3. Almost all the reductions are to education programs—\$5.4 billion to K–14 education and \$500 million to public universities. Of the K–14 reductions, roughly \$3 billion is a cut in unrestricted funding. Schools and community colleges could respond to this cut in various ways, including drawing down reserves, shortening the instructional year for schools, and reducing enrollment for community colleges. The remaining \$2.4 billion reduction would increase the amount of late payments to schools and community colleges back to the 2011–12 level. This could affect the cash needs of schools and community colleges late in the fiscal year, potentially resulting in greater short-term borrowing.

Effect on Budgets Through 2018–19. If this measure is rejected by voters, state revenues would be billions of dollars lower each year through 2018–19 than if the measure were approved. Future actions of the Legislature and the Governor would determine how to balance the state budget at this lower level of revenues. Future state budgets could be balanced through cuts to schools or other programs, new revenues, and one-time actions.

Figure 3
2012–13 Spending Reductions if Voters Reject Proposition 30

<i>(In Millions)</i>	
Schools and community colleges	\$5,354
University of California	250
California State University	250
Department of Developmental Services	50
City police department grants	20
CalFire	10
DWR flood control programs	7
Local water safety patrol grants	5
Department of Fish and Game	4
Department of Parks and Recreation	2
DOJ law enforcement programs	1
Total	\$5,951

DWR = Department of Water Resources; DOJ = Department of Justice.

For text of Proposition 30, see page 80.

LOCAL GOVERNMENT PROGRAMS

Background

In 2011, the state transferred the responsibility for administering and funding several programs to local governments (primarily counties). The transferred program responsibilities include incarcerating certain adult offenders, supervising parolees, and providing substance abuse treatment services. To pay for these new obligations, the Legislature passed a law transferring about \$6 billion of state tax revenues to local governments annually. Most of these funds come from a shift of a portion of the sales tax from the state to local governments.

Proposal

This measure places into the Constitution certain provisions related to the 2011 transfer of state program responsibilities.

Guarantees Ongoing Revenues to Local Governments.

This measure requires the state to continue providing the tax revenues redirected in 2011 (or equivalent funds) to local governments to pay for the transferred program responsibilities. The measure also permanently excludes the sales tax revenues redirected to local governments from the calculation of the minimum funding guarantee for schools and community colleges.

Restricts State Authority to Expand Program

Requirements. Local governments would not be required to implement any future state laws that increase local costs to administer the program responsibilities transferred in 2011, unless the state provided additional money to pay for the increased costs.

Requires State to Share Some Unanticipated Program Costs. The measure requires the state to pay part of any new local costs that result from certain court actions and changes in federal statutes or regulations related to the transferred program responsibilities.

Eliminates Potential Mandate Funding Liability.

Under the Constitution, the state must reimburse local governments when it imposes new responsibilities or "mandates" upon them. Under current law, the state could be required to provide local governments with additional funding (mandate reimbursements) to pay for some of the transferred program responsibilities. This measure specifies that the state would not be required to provide such mandate reimbursements.

Ends State Reimbursement of Open Meeting Act Costs.

The Ralph M. Brown Act requires that all meetings of local legislative bodies be open and public. In the past, the state has reimbursed local governments for costs resulting from certain provisions of the Brown Act (such as the requirement to prepare and post agendas for public meetings). This measure specifies that the state would not be responsible for paying local agencies for the costs of following the open meeting procedures in the Brown Act.

Fiscal Effects

State Government. State costs could be higher for the transferred programs than they otherwise would have been because this measure (1) guarantees that the state will continue providing funds to local governments to pay for them, (2) requires the state to share part of the costs associated with future federal law changes and court cases, and (3) authorizes local governments to refuse to implement new state laws and regulations that increase their costs unless the state provides additional funds. These potential costs would be offset in part by the measure's provisions eliminating any potential state mandate liability from the 2011 program transfer and Brown Act procedures. The net fiscal effect of these provisions is not possible to determine and would depend on future actions by elected officials and the courts.

Local Government. The factors discussed above would have the opposite fiscal effect on local governments. That is, local government revenues could be higher than they otherwise would have been because the state would be required to (1) continue providing funds to local governments to pay for the program responsibilities transferred in 2011 and (2) pay all or part of the costs associated with future federal and state law changes and court cases. These increased local revenues would be offset in part by the measure's provisions eliminating local government authority to receive mandate reimbursements

for the 2011 program shift and Brown Act procedures. The net fiscal effect of these provisions is not possible to determine and would depend on future actions by elected officials and the courts.

SUMMARY

If voters approve this measure, the state sales tax rate would increase for four years and PIT rates would increase for seven years, generating an estimated \$6 billion annually in additional state revenues, on average, between 2012–13 and 2016–17. (Smaller revenue increases are likely for the 2011–12, 2017–18, and 2018–19 fiscal years.) These revenues would be used to help fund the state's 2012–13 budget plan and would be available to help balance the budget over the next seven years. The measure also would guarantee that local governments continue to annually receive the share of state tax revenues transferred in 2011 to pay for the shift of some state program responsibilities to local governments.

If voters reject this measure, state sales tax and PIT rates would not increase. Because funds from these tax increases would not be available to help fund the state's 2012–13 budget plan, state spending in 2012–13 would be reduced by about \$6 billion, with almost all the reductions related to education. In future years, state revenues would be billions of dollars lower than if the measure were approved.

30 PROP. 30 TEMPORARY TAXES TO FUND EDUCATION, GUARANTEED LOCAL PUBLIC SAFETY FUNDING, INITIATIVE CONSTITUTIONAL AMENDMENT.

★ ARGUMENT IN FAVOR OF PROPOSITION 30 ★

A Message from the League of Women Voters of California and California Teachers and Law Enforcement Professionals Fellow Californians,

After years of cuts, California's public schools, universities, and public safety services are at the breaking point.

In the last four years alone, our schools have been hit with \$20 billion in cuts, over 30,000 fewer teachers, and class sizes that are among the largest in the country. Our children deserve better.

It's time to take a stand and get California back on track.

Proposition 30, the Schools & Local Public Safety Protection Act, is supported by Governor Jerry Brown, the League of Women Voters and a statewide coalition of leaders from education, law enforcement and business.

There is broad support for Prop. 30 because it's the only initiative that will protect school and safety funding and help address the state's chronic budget mess:

- **Prevents deep school cuts.** Without Prop. 30, our schools and colleges face an additional \$6 billion in devastating cuts this year. Prop. 30 is the only initiative that prevents those cuts and provides billions in new funding for our schools starting this year—money that can be spent on smaller class sizes, up-to-date textbooks and rehiring teachers.
- **Guarantees local public safety funding.** Prop. 30 is the only measure that establishes a guarantee for public safety funding in our state's constitution, where it can't be touched without voter approval. Prop. 30 keeps cops on the street.
- **Helps balance the budget.** Prop. 30 balances our budget and helps pay down California's debt—built up by years of gimmicks and borrowing. It is a critical step in stopping the budget shortfalls that plague California.

To protect schools and safety, Prop. 30 temporarily increases personal income taxes on the highest earners—couples with incomes over \$500,000 a year—and establishes the sales tax at a rate lower than it was last year.

Prop. 30's taxes are temporary, balanced and necessary to protect schools and safety:

- **Only highest-income earners pay more income tax:** Prop. 30 asks those who earn the most to temporarily pay more income taxes. Couples earning below \$500,000 a year will pay no additional income taxes.
- **All new revenue is temporary:** Prop. 30's taxes are temporary, and this initiative *cannot be modified without a vote of the people.* The very highest earners will pay more for seven years. The sales tax provision will be in effect for four years.
- **Money goes into a special account the legislature can't touch:** The money raised for schools is directed into a special fund the legislature can't touch and can't be used for state bureaucracy.
- **Prop. 30 provides for mandatory audits:** Mandatory, independent annual audits will insure funds are spent ONLY for schools and public safety.

Join with the League of Women Voters and California teachers and public safety professionals.

Vote YES on Proposition 30.

Take a stand for schools and public safety.

To learn more, visit YesOnProp30.com.

JENNIFER A. WAGGONER, President
League of Women Voters of California
DEAN E. VOGEL, President
California Teachers Association
KEITH ROYAL, President
California State Sheriffs' Association

★ REBUTTAL TO ARGUMENT IN FAVOR OF PROPOSITION 30 ★

Supporters of Prop. 30 say we either have to approve a huge tax hike or schools get cut.

We all want excellent schools in California, but raising taxes isn't the only way to accomplish this.

The politicians would rather raise taxes instead of streamlining thousands of state funded programs, massive bureaucracy and waste.

Look at what they just did: politicians authorized nearly \$5 billion in California bonds for the "bullet train to nowhere," costing taxpayers \$380 million per year. Let's use those dollars for schools!

Instead, the politicians give us a false choice—raise sales taxes by \$1 billion per year and raise income taxes on small business OR cut schools.

PROP. 30 IS NOT WHAT IT SEEMS: It doesn't guarantee even one new dollar of funding for classrooms. No on Prop. 30: It allows the politicians to take money currently earmarked for education and spend it on other programs. We'll never know where the money really goes.

No on Prop. 30: It gives the Sacramento politicians a blank check without requiring budget, pension or education reform.

No on Prop. 30: It hurts small businesses and kills jobs.

No on Prop. 30: It's just more money for the Sacramento politicians to keep on spending.

Don't be misled, Prop. 30 is not what it seems. It is just an excuse for Sacramento politicians to take more of your money, while hurting the economy and doing nothing to help education.

Californians are too smart to be fooled: *Vote No on Prop. 30!*

JOEL FOX, President
Small Business Action Committee
JOHN KABATEOK, Executive Director
National Federation of Independent Business/California
KENNETH PAYNE, President
Sacramento Taxpayers Association

30 PROP. 30 TEMPORARY TAXES TO FUND EDUCATION, GUARANTEED LOCAL PUBLIC SAFETY FUNDING, INITIATIVE CONSTITUTIONAL AMENDMENT.

★ ARGUMENT AGAINST PROPOSITION 30 ★

NO on Prop. 30: It is just a \$50 Billion Political "Shell Game"—But Doesn't Guarantee New Funds for Schools
The politicians behind Prop. 30 want us to believe that if voters approve Prop. 30's seven years of massive tax hikes, the new money will go to classrooms. Nothing could be further from the truth.

Prop. 30 allows the politicians to play a "shell game" instead of providing new funding for schools:

- They can take existing money for schools and use it for other purposes and then replace that money with the money from the new taxes. They take it away with one hand and put it back with the other hand. No matter how you move it around, Prop. 30 does not guarantee one penny of new funding for schools.
- Many educators have exposed this flaw and even the California School Boards Association stated that "... the Governor's initiative does not provide new funding for schools." (May 20, 2012)
- The Wall Street Journal identified the same flaw, stating that "California Governor Jerry Brown is trying to sell his tax hike to voters this November by saying it will go to schools. The dirty little secret is that the new revenues are needed to backfill the insolvent teacher's pension fund." Wall Street Journal Editorial, April 22, 2012
- Even the official Title and Summary of Prop. 30 says the money can be used for "... paying for other spending commitments."

In addition, there are no requirements or assurances that any more money actually gets to the classroom and nothing in Prop. 30 reforms our education system to cut waste, eliminate bureaucracy or cut administrative overhead.

NO on Prop. 30—No Reforms

The politicians and special interests behind Prop. 30 want to raise taxes to pay for their out of control spending, but refuse to pass meaningful reforms:

- Special interests and the politicians they control have blocked pension reforms. We have \$500 billion in unfunded pension liabilities in California and still the politicians refuse to enact real reforms.
- The same people have blocked budget reform. The politicians continue to spend more than the state has. Prop. 30 rewards this dangerous behavior by giving them billions of dollars more to spend with no reforms, no guarantee the money won't be wasted or that it will really get to the classroom.

NO on Prop. 30—Stop the Politician's Threats

The Governor, politicians and special interests behind Prop. 30 threaten voters. They say "vote for our massive tax increase or we'll take it out on schools," but at the same time, they refuse to reform the education or pension systems to save money.

We need to grow our economy to create jobs and cut waste, clean up government, reform our budget process and hold the politicians accountable instead of approving a \$50 billion tax hike on small businesses and working families that doesn't provide any accountability or guarantee new funding for schools.

NO on Prop. 30—Reforms and Jobs First, Not Higher Taxes

JON COUPAL, President
Howard Jarvis Taxpayers' Association
TOM BOGETICH, Executive Director (Retired)
California State Board of Education
DOUG BOYD, Member
Los Angeles County Board of Education

★ REBUTTAL TO ARGUMENT AGAINST PROPOSITION 30 ★

After years of cuts, it's time to draw a line to protect schools and local public safety.

Prop. 30'S TOUGH FISCAL CONTROLS insure money is spent ONLY on schools and public safety:

- Revenue is guaranteed in the constitution to go into a special account for schools that the legislature can't touch.
- Money will be audited every year and can't be spent on administration or Sacramento bureaucracy.
- Prop. 30 authorizes criminal prosecution for misuse of money.

Our kids deserve better than the most crowded classrooms in the country. Prop. 30 asks the very wealthy to pay their FAIR SHARE to keep classrooms open and cops on the street.

- **PREVENTS DEEP SCHOOL CUTS THIS YEAR:** Prop. 30 is the only initiative that prevents \$6 billion in automatic cuts to schools and universities this year. Without Prop. 30, we face a shortened school year, teacher layoffs and steep tuition increases this year.

- **PROVIDES BILLIONS IN NEW SCHOOL FUNDING:** Prop. 30 provides billions in additional funds to reduce class sizes and restore programs like art and PE.

- **PROTECTS LOCAL PUBLIC SAFETY:** Prop. 30 guarantees local public safety funding in the State Constitution and helps save billions in future prison costs.

- **HELPS BALANCE THE BUDGET:** Prop. 30 is part of a long-term solution to balance the state budget. Teachers, law enforcement, business leaders and Governor Jerry Brown all support Proposition 30 because it's the only measure that will put California on the road to recovery. Learn more at www.YesOnProp30.com.

JENNIFER A. WAGGONER, President
League of Women Voters of California
JOSHUA PECHTHALT, President
California Federation of Teachers
SCOTT R. SEAMAN, President
California Police Chiefs Association

Appendix F: Additional descriptives statistics

List of origins (133)

United Kingdom excluding England and Scotland, England, Scotland, Ireland, Denmark, Norway, Sweden, Other Northern Europe, Austria, Belgium, France, Germany, Netherlands, Switzerland, Other Western Europe, Greece, Italy, Portugal, Spain, Other Southern Europe

Albania, Belarus, Bulgaria, Croatia, Czechoslovakia (includes Czech Republic and Slovakia), Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Ukraine, Bosnia and Herzegovina, Serbia, Other Eastern Europe, Europe, n.e.c.

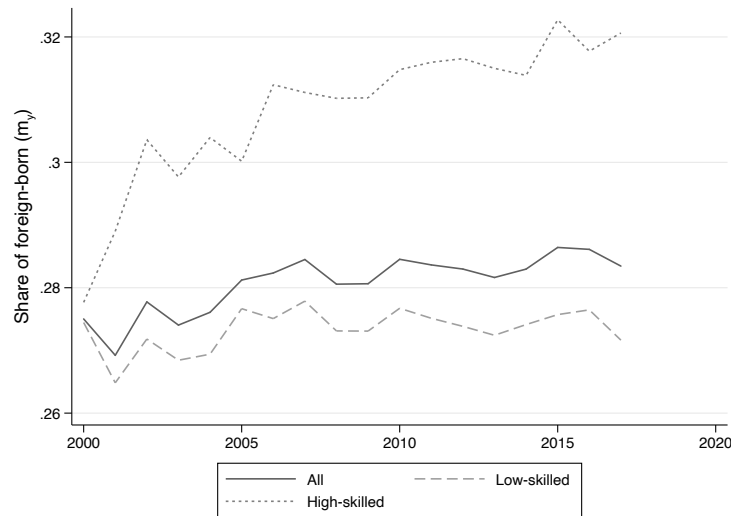
China excluding Hong Kong and Taiwan, Hong Kong, Taiwan, Japan, Korea, Other Eastern Asia, Afghanistan, Bangladesh, India, Iran, Kazakhstan, Nepal, Pakistan, Sri Lanka, Uzbekistan, Other South Central Asia, Cambodia, Indonesia, Laos, Malaysia, Burma, Philippines, Singapore, Thailand, Vietnam, Other South Eastern Asia,

Iraq, Israel, Jordan, Kuwait, Lebanon, Saudi Arabia, Syria, Yemen, Turkey, Armenia, Other Western Asia, Asia,n.e.c., Eritrea, Ethiopia, Kenya, Somalia, Other Eastern Africa, Cameroon, Other Middle Africa, Egypt, Morocco, Sudan, Other Northern Africa, South Africa, Other Southern Africa, Cabo Verde, Ghana, Liberia, Nigeria, Sierra Leone, Other Western Africa, Africa, n.e.c.

Canada, Other Northern America, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Vincent and the Grenadines, Trinidad and Tobago, West Indies, Other Caribbean, Mexico, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Other Central America, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Peru, Uruguay, Venezuela, Other South America,

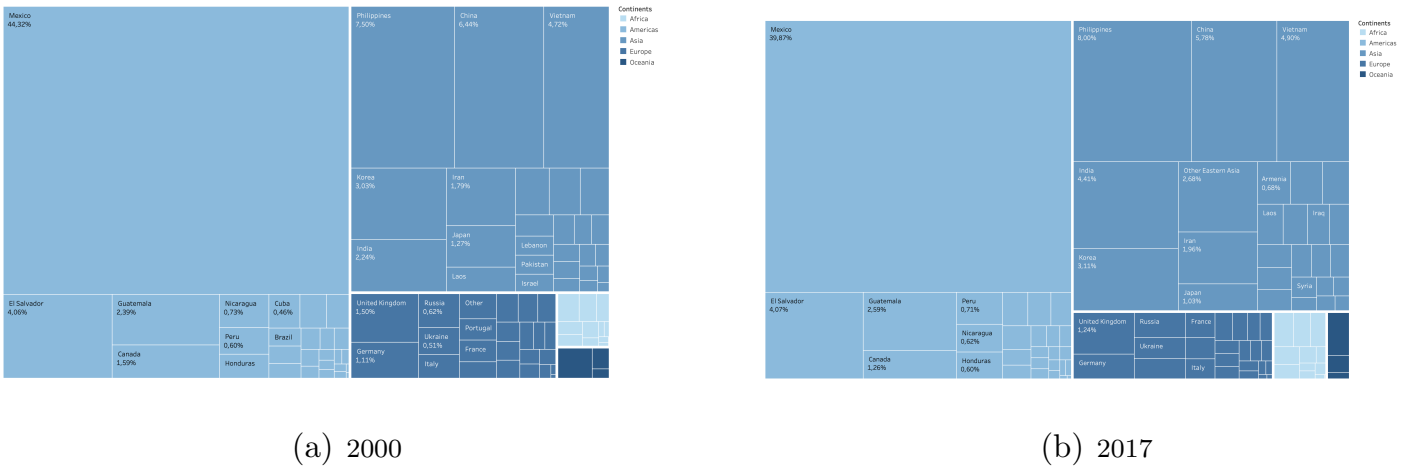
Australia, Other Australian and New Zealand Subregion, Fiji, Oceania, n.e.c.

Figure F1: Immigration trends in California from 2000 to 2017



Notes: Figure F1 depicts the evolution of the share of immigrants in the total California resident population between 2000 and 2017. This variable is computed for the entire population as well as for high-skilled (college-graduate) and low-skilled immigrants. Source: Authors' elaboration on American Community Surveys.

Figure F2: Diversity among immigrants in California, 2000 vs. 2017



Notes: Figure F2 depicts, for the years 2000 and 2017, the share of immigrants' origin countries in the total immigrant population. Source: Authors' elaboration on American Community Surveys and 2000 census (Summary File 3).

Appendix G: Immigration and voter turnout

We have controlled in our empirical analysis for the electorate structure, namely the turnout rate, the proportion of voters from each party and the ethnic composition of each census tract. The aim was to account for potential variation in the electorate due to arrival of pro-liberal voters among newly naturalized migrants or to the exit of conservative natives. The turnout rate may receive specific attention as another electoral outcome of interest. We define turnout as in [Mayda et al. \(2019\)](#) and [Brunner et al. \(2011\)](#), namely as the sum of votes (Democrat and Republican votes for candidate elections, and ‘yes’ and ‘no’ votes for ballot propositions), divided by the number of eligible voters (the sum of natives and naturalized migrants aged 18 and over). We use the same empirical strategy as in the core of the paper using the census-tract voter turnout as dependent variable. Estimates are reported in [Table G1](#) below. Column 1 provides evidence of a positive and significant effect of migration on turnout. A one standard deviation increase of the migrant share in a census tract increases the voter turnout by around 4 percentage points. This effect may be interpreted as an increased mobilization of voters in response to migration inflows, which could in turn affect the Democrat vote positively or negatively (in [Table 2](#), we show that it has a positive effect, i.e. it is opposed to the party preference effect). We further show that this result applies to votes for both candidates and propositions (columns 2 and 3). The effect is mainly driven by the inflows of non-citizens (column 4). In contrast, the arrival of naturalized migrants may lead to less mobilization, or simply tend to reduce the turnout rate mechanically (by increasing the turnout denominator) while being less likely to participate to votes compared to their natives counterparts. The results are robust to the inclusion of vote fixed effects (column 5) and to the weighting of tract by voting age population (column 6).

Table G1: Effect of Migrant Share on Voter Turnout

	(1)	(2)	(3)	(4)	(5)	(6)
	All	Candidates	Propositions	All	All	All
Mig_{ty}	0.210*** (0.009)	0.202*** (0.008)	0.218*** (0.009)			
$Mig_{ty}^{noncitizen}$				0.357*** (0.012)	0.357*** (0.012)	0.359*** (0.012)
$Mig_{ty}^{naturalized}$				-0.057*** (0.016)	-0.057*** (0.016)	-0.048*** (0.013)
Census tract FE	✓	✓	✓	✓	✓	✓
County × Year FE	✓	✓	✓	✓	✓	✓
Vote FE					✓	
Voting Pop. Weights						✓
Nb. of Observations	699,320	274,982	424,337	699,320	699,320	699,320
Nb. Propositions	54	0	54	54	54	54
Nb. Elec. Candidates	40	40	0	40	40	40
R^2	0.921	0.918	0.925	0.924	0.930	0.930

Note: The dependent variable is the voter turnout for each vote v . Mig_{ty} is the share of foreign born in the total resident population (aged 18 and more) of the census tract. Standard errors clustered at the county level are reported in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Observations in column (6) are weighted by the voting population in the tract. Source: Authors' elaboration on NGHS and IGS data.