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# Income Inequality, Social Mobility, and Electoral Participation in the U.S. Counties: Revisiting the Inequality-Participation Nexus

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#### **Abstract**

Previous research has provided contested hypotheses about the impact of income inequality on electoral participation. This study reexamines the debate between conflict and relative power theories by focusing on a largely ignored factor: social mobility. We argue that social mobility conditions the inequality-participation nexus by alleviating the frustration, class conflict, and efficacy gaps between the rich and the poor that the prevailing theories assume income inequality to create. By utilizing the Cooperative Congressional Election Survey (CCES), we test this argument focusing on U.S. counties. Our analysis confirms that the effects of income inequality on citizens' likelihood of voting vary depending on mobility, suggesting that social mobility provides a crucial context in which income inequality can play out in substantially different ways. This article implies that more scholarly endeavors should be made to clarify the multifaceted structure of inequality for improving our understanding of the relationship between economic and political inequality.

**Keywords**: Income Inequality, Social Mobility, Electoral Participation, Conflict Theory, Relative Power Theory

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With a dramatic increase in income inequality in the United States during the past decades, the causes and consequences of income inequality have received much scholarly attention (e.g., Hacker and Pierson, 2010; Kelly and Enns, 2010). Particularly, many scholars have examined how income inequality affects political participation. The existing literature provides two conflicting views regarding this question. On the one hand, the conflict theory suggests that there is a positive relationship between income inequality and individuals' participation in politics (Brady, 2004; Meltzer and Richard, 1981). The relative power theory, on the other hand, contends that income inequality depresses political participation in general and has a more severe impact on lower-income earners in particular (Goodin and Dryzek, 1980; Solt, 2008, 2010). With the conflicting theoretical predictions as well as mixed empirical evidence in the literature, the relationship between income inequality and political participation remains an interesting yet elusive issue to tackle.

This article revisits the debate by focusing on a factor that has been largely ignored in previous research: social mobility. Social mobility refers to the extent to which individuals can move up or down the ladder of socioeconomic status in society (Blau and Duncan, 1967; Goldthorpe et al., 1980; Lipset and Bendix, 1959). Although social mobility and income inequality are related, they are two distinct concepts (Beller and Hout, 2006; OECD, 2018). Whereas income inequality refers to income gaps among people at any point in time, social mobility refers to an opportunity structure that allows inter-class movements. Therefore, among

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<sup>&</sup>lt;sup>4</sup> There is literature that suggests that class bias in the electorate leads to income inequality (e.g., Avery, 2015; Carey and Horiuchi, 2017; Franko et al., 2016). We agree that economic consequences like income inequality are not created in a vacuum but can be the results of deliberate policy and political decisions influenced by who participates in politics and who politicians are responsive to. With this possibility acknowledged, however, this article focuses on the consequences of inequality on electoral participation.

similarly unequal societies, there could be considerable variation in social mobility. For instance, Greece and the U.S., two highly unequal societies among OECD countries, are located at exactly the same spot in terms of income inequality, but Greece has a significantly higher level of social mobility than the U.S. (OECD, 2018).<sup>5</sup>

Then, would the differing levels of social mobility make any difference in the political participation of unequal societies in a meaningful way? The conflict theory and the relative power theory cannot answer this question because they do not consider social mobility.

Therefore, variance in social mobility among societies at a given level of income inequality, such as that within Greece and the U.S., goes unnoticed in the existing debate. We believe that this is part of the reason for the empirical irregularity in previous studies. This article argues that social mobility should be considered in order to understand the causal link between income inequality and participation correctly because it plays a mediating role by modifying the effects of income inequality upon participation. Specifically, we posit that social mobility could be an antidote to the debilitating effects that income inequality is hypothesized to have by increasing belief in meritocracy, reducing frustration and anxiety about class divisions, and decreasing an efficacy gap between the rich and the poor.

Therefore, this article aims to revisit the long-held debate by considering social mobility as a mediating factor. According to conflict theory, we would expect to see more individuals being mobilized to participate in politics in an unequal society as social mobility goes down.

However, according to relative power theory, the opposite outcome is expected: Low social

<sup>&</sup>lt;sup>5</sup> The Gini coefficient for both Greece and the U.S. is 0.35, which categorizes them as highly unequal societies (the OECD average is 0.30). However, the intergenerational income mobility for Greece is 0.68 while that of the U.S. is 0.59 (the OECD average is 0.63). Greece is one of the most mobile societies among the OECD countries, and the U.S. belongs to the immobile group.

mobility in an unequal society may further chill the political participation of its citizenry. On the other side, when social mobility is high, it could mitigate the negative consequences of income inequality, thus watering down such a mobilizing effect of inequality (conflict theory) or a demobilizing effect of inequality (relative power theory). This provides a setting that has gone largely unnoticed in the existing debate. In this research, we explore the conditional influence of social mobility, measured as intergenerational income mobility, on the link between income inequality and electoral participation, the most studied aspect of democratic political participation, in U.S. counties using data from the Cooperative Congressional Election Survey (CCES). Our analysis provides strong evidence that social mobility plays a critical role in mediating the impact of income inequality on electoral participation in a democracy.

This article contributes to the literature in several ways. First, it sheds light on a factor that has been ignored in the existing studies of inequality and electoral participation. By elucidating the interactive relationship between income inequality and social mobility, this study improves our understanding of how inequality affects electoral participation in a democracy. Second, this study offers a county-level analysis of inequality and mobility in the U.S. Recent studies have shown that people rely heavily on local cues rather than those from the macro-level contexts when evaluating the overall distribution of income, their place in it, and the fairness of the system (Cruces et al., 2013; Hauser and Norton, 2017; Newman et al., 2015). Therefore, we believe that it is more appropriate to focus on local-level inequality and mobility than on either national- or state-level indicators when investigating their impact on political participation.

Lastly, the CCES data allows us to examine vote-validated turnout to capture actual electoral participation. By using validated voter turnout data, this study can examine the impact of income

disparities on electoral participation more accurately than most other studies that rely on traditional self-reported turnout data (Ansolabehere and Hersh, 2012; Franko, 2015).

### **Income Inequality and Electoral Participation**

Concerning the relationship between income inequality and electoral participation, scholarship has generated two competing predictions. The conflict theory argues that income inequality encourages voter turnout because it intensifies the existing social cleavage between the haves and have-nots. The rich become averse to the idea of redistributing their wealth to society, while those below the median income develop strong demands for extensive redistribution of wealth (Meltzer and Richard, 1981). As income inequality polarizes and politicizes the views regarding redistribution, individuals from all classes are motivated to participate in politics (Brady, 2004; Newman et al., 2015; Oliver, 2001). As long as electoral competition provides adequate channels through which these competing preferences are articulated and represented, inequality should encourage people to be highly participatory.

The relative power theory presents the opposite argument. It postulates that income inequality discourages political participation in general but more severely affects those with fewer resources. Inequality widens the resource gap between the rich and the poor, deprives the poor of the means to participate in politics, and reinforces the dominance of the rich. In short, relative power theory asserts that income inequality leads to political inequality (c.f. Dahl, 2006). According to Bachrach and Baratz (1962), the rich are capable of maintaining their dominance by limiting the scope of the agenda to be discussed in the political arena to their advantage. Therefore, electoral competition in a society with a highly uneven distribution of wealth would not adequately address the issues that concern the poor. Through experiencing repeated

frustrations that the political system cannot resolve their demands, the poor are discouraged from participating in politics (Gaventa, 1982; Goodin and Dryzek, 1980; Lukes, 1986; Schattschneider, 1975). Chronic income inequality and the ensuing political frustration generate political apathy and cynicism among the lower-income strata of society.

The empirical evidence on this topic is mixed. On the one hand, Solt (2010) shows that income inequality largely depresses electoral participation in U.S. gubernatorial elections, supporting relative power theory. Other cross-national studies confirm the negative impact of income inequality on political participation as well (Anderson and Beramendi, 2008; Jaime-Castillo, 2009; Solt, 2008). On the other hand, Newman, Johnston, and Lown (2015) find that income inequality dampens citizens' belief in meritocracy and thus strengthens class consciousness in the U.S. counties. As predicted by conflict theory, the heightened conflict between the haves and have-nots stimulates political activism among individuals (Brady, 2004; Oliver, 2001). Moreover, many scholars find no clear effects of inequality on electoral turnout with a cross-national sample, leaving the inequality-participation debate unanswered satisfactorily (Horn, 2011; Stockemer and Parent, 2014; Stockemer and Scruggs, 2012).

This article points out two theoretical and empirical factors that could be responsible for such empirical irregularity in the literature. First, by focusing on one aspect of economic inequality—the extent of the income gap between the rich and the poor—the existing theories overlook the fact that the nature and consequences of income inequality could vary substantially by context. Second, the existing research with an individual-level focus relies heavily on self-reported electoral turnout. This poses a great challenge to examining the impact of inequality on voter turnout accurately, as the number of reported voters in the surveys usually exceeds the actual turnout (Franko, 2015; Granberg and Holmberg, 1991). To address this issue, this study

employs vote-validated turnout data. By adopting more accurate conceptual and empirical approaches, the current study contributes to clarifying the relationship between economic disparities and the democratic participation of a citizenry.

## Social Mobility: Mediating the Effect of Income Inequality on Electoral Participation

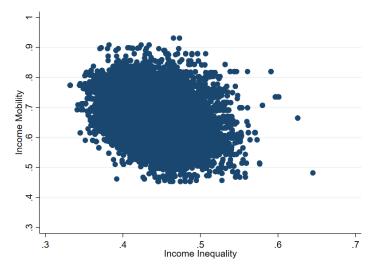
Social mobility refers to the extent of an individual's chances of moving up or down the social ladder. Breen and Jonsson (2007) conceptualize social mobility as social fluidity, defining it as an "index of equality in the chances of access to more or less advantageous social positions between people coming from different social origins" (p. 1776). Therefore, the more socially mobile a society is, the more open the opportunity structure is for advancing in the socioeconomic hierarchy regardless of one's background.<sup>6</sup> In the literature, scholars distinguish *inter*-generational mobility and *intra*-generational mobility. The former considers "whether and how far children move up or down the social scale compared to their parents or grandparents" (Giddens and Sutton, 2017: 143), whereas the latter looks at how far individuals move up or down the social scale during an individual career, such as the "respondent's first job compared to his or her present job" (Marshall, 1998: 1739). As intergenerational mobility encompasses a more comprehensive opportunity structure of society, it has received more political and scholarly

<sup>&</sup>lt;sup>6</sup> This article conceptualizes social mobility in relative terms instead of absolute terms. Absolute social mobility, also called structural mobility, refers to macro societal-level changes in class or economic status among people. Instead of accounting for an individual's chances of reaching a particular socioeconomic status, it refers to the actual proportion of mobile individuals in absolute terms, which may largely result from societal-level factors such as economic growth (Curtis, 2016). For instance, people in most OECD countries have been mobile via living in improved conditions compared to their parents thanks to the economic growth and social progress their countries have achieved (see, OECD, 2018).

attention than intragenerational mobility (Breen and Jonsson, 2007; OECD, 2018; Yaish and Andersen, 2012).

There are various ways to measure intergenerational mobility. For instance, many researchers focus on income mobility, occupational mobility, and education mobility (Beller and Hout, 2006; Goldthorpe, 2013; OECD, 2018). This article looks at intergenerational income mobility in measuring the extent to which an individual is susceptible to reaching a better or worse position in the distribution of income than his/her parents. As we assert that the level of frustration and class anxiety is a function not purely of how disproportionately income is distributed in society, but also of how mobile the individuals are within the distribution of income, we consider intergenerational income mobility the appropriate measure of social mobility for our purposes.

Figure 1. Income Inequality and Intergenerational Income Mobility Among U.S. Counties



Note: Income inequality is measured as the 2014 Gini coefficient provided by the U.S. Census Bureau, while mobility is measured as the intergenerational income mobility calculated by Chetty et al. (2014).

Utilizing Chetty et al.'s (2014) data of intergenerational income mobility in U.S. counties, we examine its relationship with income inequality, measured as the Gini coefficient. Figure 1 confirms our view that income inequality and social mobility are two different concepts, although they are mildly negatively correlated (r = -.32) as the "Great Gatsby curve" suggests (Chetty et al., 2014: 1557). It indicates that intergenerational income mobility varies substantially within the U.S. counties with the same level of income inequality.

Then, how would social mobility intervene in the ways that income inequality affects electoral participation? Extant studies assume that more individuals are likely to feel frustrated and lose their sense of efficacy as the distribution of wealth in society becomes skewed toward the top. Also, as the income gap between the rich and the poor gets wider, class consciousness and inter-class tension are likely to sharpen. The existing debates, however, have been largely silent about the fact that these consequences of income inequality could vary substantially by context, thus affecting their impact on individuals' political participation. This article points out that social mobility is one of the major contextual factors, conditioning the extent to which income inequality generates inter-class anxiety and efficacy gaps in society. This argument lies closely in line with the implications of the literature on social mobility and political orientation, particularly regarding its relations to class and meritocracy.

The literature suggests that social mobility reduces class consciousness and depoliticizes the existing class cleavage. Mobile individuals are likely to develop heterogeneous class identities and attitudes because their class of destination is different from their class of origin (Abramson and Books, 1971; Daenekindt, 2017; De Graaf et al., 1995; De Graaf and Ultee, 1990). Referring to this, Sorokin (1927) argues that social mobility requires a corresponding accommodation of attitudes as individuals acquire a different position than their parents in the

social hierarchy. Although mobile individuals are required to be versatile and adaptive to their new social positions, they cannot be completely free from the influence of their class of origin (Daenekindt, 2017). Therefore, people in a mobile society tend to have more diverse and less class specific views, contributing to blurring societal cleavages. Also, an open class structure with high class-movement rates weakens economic discontent and diffuses class cohesion and solidarity, making violent class conflicts and hostility less likely (Abramson and Books, 1971; Curtis, 2016). For this reason, as a society gets more mobile, Clark and Lipset (1991) argue that the prominence of the traditional left-right economic dimension reduces, the strength of class voting weakens, and society becomes fragmented with the emergence of new issues.

Also, in a slightly different context, social mobility augments trust in meritocracy. In a mobile society, individuals view wealth as being distributed fairly according to meritocratic principles (e.g., Alesina et al., 2018; Jaime-Castillo, 2008). More individuals believe that everyone has a fair chance to go as far as their talents and effort allow and that what determines where you are is merit, not privilege. Accordingly, the existing inequalities are considered fair outcomes; wealth is viewed as a reward for talent and hard work, and poverty is seen as the consequence of a lack of such qualities (Alesina et al., 2018). For this reason, high social mobility breeds individualism and a sense of self-reliance, which discourages the fomentation of social discontent and class struggle (Breen, 2001; De Graaf and Ultee, 1990; Lopreato, 1967; Stacey, 1966). Relatedly, social mobility has been found to lead individuals to be less supportive of redistribution, mainly because of the increased belief in meritocracy (Alesina et al., 2018; Alesina and La Ferrara, 2005; Benabou and Ok, 2001; Jaime-Castillo, 2008; Jaime-Castillo and Marqués-Perales, 2019; Piketty, 1995). Moreover, social mobility promotes satisfaction with the existing social order through the enhanced sense of social justice and fairness (Lopreato, 1967;

Stacey, 1966) and creates a "cult of gratitude," particularly among the upwardly mobile (Tumin, 1957: 35).

In addition, social mobility helps individuals view the value and potential of their political actions positively (Houle and Miller, 2019). In a society with high mobility, individuals, including impoverished ones, are more likely to consider themselves efficacious and their voices deserving of attention from politicians than those in an immobile society. This is one reason that many scholars of democratic theory have believed social mobility is a crucial condition for the prosperity of democracy (see, e.g., Blau and Duncan, 1967; Lipset and Bendix, 1959; Tocqueville, 2003).

To sum, social mobility can intervene in the impact of income inequality on political participation by influencing the extent to which increased income gaps stir class consciousness and anxiety and generate frustration due to people's trust in meritocracy. Also, social mobility can medicate the relationship between income inequality and political participation by helping people not feel powerless but believe they are the masters of their own fate and allowing them to have a sense of political efficacy. One should note that the first mechanism relates to the conflict theory and the second mechanism the relative power theory. Therefore, by inferring from the two leading theories in the literature, we can predict some contrasting scenarios on how income inequality affects electoral participation of individuals depending on the level of social mobility.

First, let us consider scenarios in which social mobility is high. Based on conflict theory, we would expect high social mobility to dampen the mobilizing effect of income inequality by lowering class anxiety and conflict. In other words, social mobility would depoliticize the class conflict surfaced by inequality and thus reduce the motivation for political participation among individuals of all classes. According to relative power theory, however, we would expect high

mobility to offset the demobilizing effect of income inequality through two separate mechanisms. First, mobility would make the poor maintain a certain degree of efficacy and help them view themselves as still equipped with some capacity for political participation despite high income inequality. In short, high social mobility would prevent the disadvantaged from rationally disengaging from politics by not significantly dismantling their belief in their "chances of winning" in politics (Goodin and Dryzek, 1980: 286). Second, mobility would mobilize the wealthy because they have a lot to lose, and their likelihood of losing their dominance and privilege is higher with high rates of social mobility. Therefore, as mobility increases their "utility from winning," the upper classes would become more invested in politics and adopt policies that create less mobility (Goodin and Dryzek, 1980: 286). Through these mechanisms, in the scenario of relative power theory, we would expect high social mobility to lead to more participation in both the lower and upper classes than otherwise in the face of income inequality.

On the contrary, when social mobility is low, it exacerbates the negative consequences of income inequality, providing a prototypical context for both theories to work. For instance, according to conflict theory, the lower the social mobility is, the more frustration and class anxiety exist, which would lead to more participation by all classes. According to relative power theory, however, low social mobility would create wider political-resource and efficacy gaps between the poor and the wealthy, which would decrease overall political participation but hurt the poor more significantly. By testing the hypotheses proposed above, we can rigorously examine the nuanced implications of the two leading theories and thus their validity. Therefore, without making an a priori prediction, we examine how the relationship between income inequality and electoral participation would be mediated by social mobility.

# Low mobility + High inequality

- Hypothesis 1 (conflict theory): In an immobile society, income inequality increases the electoral participation of all classes.
- Hypothesis 2 (relative power theory): In an immobile society, income inequality reduces overall electoral participation, especially in the lower classes.

# <u>High mobility + High inequality</u>

- Hypothesis 3 (conflict theory): In a mobile society, income inequality does not necessarily increase electoral participation.
- Hypothesis 4 (relative power theory): In a mobile society, income inequality does not necessarily reduce electoral participation in general nor reduce the lower classes' participation significantly more than the upper classes'.

#### **Data and Methods**

To test our predictions, we utilize data provided by the Cooperative Congressional Election Survey (CCES). One of the major advantages that the CCES offers is that it provides validated voter turnout data. The reliability of self-reported electoral participation is known to be questionable, and this poses a significant challenge in studying the relationship between inequality and electoral participation. Over-reporting of voting is a particularly prevalent issue in opinion polls, which then creates bias and leads to incorrect conclusions (Abramson and Claggett, 1991; Ansolabehere and Hersh, 2012; Franko, 2015; Shaw et al., 2000; Silver et al., 1986). In that regard, the CCES gives us an unparalleled opportunity to circumvent the problem effectively. It provides validated electoral participation data of a nationally stratified sample of 50,000 American citizens, with each claim of voting checked against the state administration files. For the unmatched respondents, we treat them as non-voters instead of dropping them from the analysis. Grimmer et al. (2018) clearly show that the turnout rate based on the CCES

approximates the actual turnout rate if we treat these unmatched voters as non-voters. Our dependent variable is a dichotomized measure of electoral participation.

The key concepts of our analysis are income inequality and social mobility. To measure income inequality at the county level in the U.S., we utilize the Gini coefficient. The Gini coefficient measures the distribution of income on a 0-1 scale, where the value of 0 indicates a perfectly equal income distribution in a county and 1 indicates complete inequality. The county-level data is taken from the U.S. Census Bureau American Community Survey from 2010 to 2018. In our dataset, it varies from .32 (Sublette County, Wyoming in 2016) to .65 (East Carroll Parish, Louisiana in 2010).

Along with the Gini coefficient, we also use the top 5% income share of counties for a robustness check. Despite being a less comprehensive concept than the Gini coefficient, it may capture the trend of inequality more accurately in the U.S. context, as recent studies suggest that the rise of income inequality in the U.S. is primarily driven by the excessive swelling of top incomes (Franko, 2017; Piketty and Saez, 2003). The correlation between the two measures of inequality is .93. As an additional robustness check, we further utilize the top 1% and top 20% income shares (See, Table A.2).

To measure social mobility at the county level, we utilize the intergenerational income mobility index developed by Chetty et al. (2014). Based on the administrative tax records of more than 40 million income earners from 1996 to 2012, the index measures the extent to which the parents' income (estimated between 1996 and 2000) determines the children's income (measured between 2011 and 2012). The index is the rank-rank slope calculated by regressing the children's income rank on the parents' income rank, with higher values reflecting lower social mobility. The index varies from 0.07 (Presidio County, Texas) to .55 (Jefferson County,

Georgia). We reverse the index into an intergenerational income mobility index so that higher values indicate higher mobility, meaning that there is less influence of parents' income on children's income.

We believe that county-level measures of income inequality and mobility are more appropriate than state- or national-level ones when examining their effects on policy attitudes or political behavior such as electoral participation. People's immediate environments exert the largest influence on the formation of their views about inequality and mobility because people tend to draw cues from the proximate context (Cruces et al., 2013; Hauser and Norton, 2017; Newman et al., 2015; Xu and Garand, 2010). Cruces and his colleagues (2013) argue that most people rely heavily on cues from their neighborhoods or areas of residence when developing their opinions on income inequality. They are not sophisticated enough to apply Bayes' rule to infer the true state of income distribution for the entire population. This becomes an issue given that there is a great deal of variation in inequality and mobility across counties in the U.S. (Newman et al., 2015). However, we also run models using state-level measures for a robustness check. The results are reported in the Appendix (Table A.6).

We include contextual variables to control various county-level factors following

Newman, Johnston, and Lown (2015) and Solt (2010). These include population (the natural
logarithm), median household income (the natural logarithm), Southern county, ethnic diversity,
the timing of the close of voter registration, and election competitiveness. For ethnic diversity,
instead of the percentage of blacks, we adopt the index of ethnic fractionalization, one minus the
Herfindahl index, which estimates the probability that two randomly chosen people in a society
are from different ethnic groups (Alesina et al., 1999). We believe that the ethnic
fractionalization index captures the concept of diversity more comprehensively than the

percentage of blacks. Using six categories of race, we calculate the diversity index, which varies between 0 and .82. Of the total 3,014 counties included in our analysis, two counties do not have ethnic diversity at all (Grant County in Kentucky and Robertson County in Nebraska), while eight counties score .70 and higher. All of these variables are based on the data provided by the U.S. Census Bureau American Community Survey. Lastly, based on data provided by the Federal Election Commission, we calculate the margin of victory in U.S. House races for each congressional electoral district, calculated as the difference between the share of votes cast for the winning candidate and for the second-place candidate.

We also control for individual-level factors. The conventional SES model states that income plays a determinative role in an individual's political participation. In modeling income to analyze the inequality-mobility-voter turnout nexus, it is more appropriate to conceptualize income in relative than absolute terms (e.g., Jensen and Jespersen, 2017). The CCES contains a household income variable with 12 categories. We transform this variable into income quintiles for each state, with a value of 1 indicating the poorest quintile and 5 indicating the richest. We also calculate relative income at the county level and re-run the analysis. Given a large number of counties, however, calculating relative income at the county level significantly reduces the number of observations (by limiting our sample to the counties with at least 10 observations, we lost about 33,711 observations). Assuming that the state-level relative income largely circumscribes that of the county level, we decided to use the state-level relative income so that

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<sup>&</sup>lt;sup>7</sup> Given large under-investments in public goods like education in African American communities, and given the more intensive surveillance and criminalization in these communities, one might argue that the share of the Black population in the county is more cogent than the ethnic fractionalization index. We believe that this is a valid point and run the analysis using this measure of diversity for a robustness check. It does not change the results. See Appendix Table A4.

<sup>8</sup> https://www.fec.gov/introduction-campaign-finance/election-and-voting-information/

our analysis could be based on more observations. The correlation between state-level and county-level incomes is .93. Using county-level income does not change the results we present in this article (see the results based on the county-level relative income in Appendix Table A.3). Our analysis also includes a standard set of individual-level factors as controls: education (1 = no high school and 6 = post-graduate), age, gender (1 = female), race (1 = white), party identification (dichotomous variables for Democrats and Republicans), and political ideology (1 = very liberal and 5 = very conservative). The squared term of age is also included to control for the curvilinear effect of age on voting.

Our analysis focuses on how two contextual factors—income inequality and social mobility—affect individuals' likelihood of voting. In doing so, we utilize the multilevel modeling approach (see, Snijders and Bosker, 2011; Steenbergen and Jones, 2002). Since our dependent variable is dichotomous, we employ a two-level multilevel logistic regression analysis with election-year fixed effects. The three-level (individual-, county-year-, and county-level) logistic regression analysis results are also presented in the Appendix (Table A.5). The analytic strategy is straightforward. We examine the effect of county-level inequality on individuals' electoral participation and how it varies depending on the social mobility in the counties in which they reside. Our final dataset includes 289,804 individuals in 3,014 U.S. counties from the 2010 to 2018 general election years.

#### **Results**

Table 1 presents the results of the multilevel logistic regression analyses. The first column displays the baseline model results (Model 1), while the following columns show the results from the interaction models. The models in the last three columns replicate the analysis

with the top 5 % income share as an alternative inequality measure. According to Model 1, income inequality dampens electoral participation, which is consistent with the relative power theory. However, the interaction analysis reveals an interesting picture. In Model 2, we can see that the coefficient of baseline inequality turns positive, which indicates the effects of income inequality on electoral participation when mobility takes the value of zero. This means that income inequality mobilizes people to turn out to vote when there is complete immobility in place, as conflict theory postulates (Hypothesis 1). As intergenerational income mobility enhances, the negative and statistically significant interaction term begins to cancel out the positive effect of income inequality on electoral participation. As mobility increases and approaches its maximum value (.93), the effect of inequality becomes negative. How should we interpret this result? We believe this conforms to Hypothesis 3, which states that income inequality combined with high social mobility does not necessarily increase electoral participation. It can be considered as evidence for conflict theory. The re-estimation with the top 5% income share as an alternative to Gini coefficients yields the same results. The additional estimations with both the top 1% and 20% income shares reaffirm these findings (Table A.2).

Table 1. Income Inequality and Income Mobility for Electoral Participation

	DV: Vote-validated Electoral Participation					
	Gini Index	Gini Index	Gini Index	Top 5%	Top 5%	Top 5%
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Inequality	-0.941***	10.837***	11.768***	-0.006*	0.107***	0.068
	(0.322)	(2.666)	(3.974)	(0.004)	(0.034)	(0.051)
Mobility	0.362**	8.188***	8.205***	0.372**	3.833***	2.654*
	(0.164)	(1.768)	(2.672)	(0.164)	(1.031)	(1.594)
Inequality × Mobility		-17.463***	-15.156***		-0.169***	-0.069
		(3.925)	(5.820)		(0.050)	(0.075)
Household income	0.089***	0.089***	0.657	0.089***	0.089***	0.117
	(0.004)	(0.004)	(0.505)	(0.004)	(0.004)	(0.309)
Income × Inequality			-0.664			0.010
			(1.079)			(0.014)
Income × Mobility			-0.242			0.278
			(0.731)			(0.451)
$Income \times Inequality \times Mobility$			-0.326			-0.029
			(1.565)			(0.021)

Education	0.160***	0.161***	0.161***	0.160***	0.160***	0.161***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Age	0.046***	0.046***	0.046***	0.046***	0.046***	0.046***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
$Age^2$	-0.008***	-0.008***	-0.008***	-0.008***	-0.008***	-0.008***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Female	-0.070***	-0.070***	-0.070***	-0.070***	-0.070***	-0.070***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
White	0.415***	0.415***	0.419***	0.415***	0.415***	0.418***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Dem	0.280***	0.280***	0.281***	0.280***	0.280***	0.281***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
GOP	0.310***	0.310***	0.310***	0.310***	0.310***	0.310***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Ideology	-0.023***	-0.023***	-0.023***	-0.023***	-0.023***	-0.023***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Married	-0.011	-0.011	-0.011	-0.011	-0.011	-0.011
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Ln(population)	0.025***	0.029***	0.028***	0.021**	0.022**	0.021**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Ln(median income)	-0.042	-0.041	-0.044	0.003	0.004	-0.002
	(0.049)	(0.049)	(0.049)	(0.045)	(0.045)	(0.045)
Southern states	-0.103***	-0.101***	-0.103***	-0.102***	-0.100***	-0.102***
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Diversity	-0.270***	-0.303***	-0.300***	-0.307***	-0.322***	-0.316***
	(0.066)	(0.066)	(0.066)	(0.064)	(0.064)	(0.064)
Registration deadline	-0.002**	-0.002**	-0.002**	-0.002**	-0.002**	-0.002**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Margin of victory	-0.071***	-0.071***	-0.073***	-0.072***	-0.073***	-0.075***
	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Constant	-2.390***	-7.729***	-8.835***	-3.103***	-5.457***	-5.191***
	(0.539)	(1.317)	(1.902)	(0.451)	(0.826)	(1.168)
Observations	236,738	236,738	236,738	236,738	236,738	236,738
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Number of groups	2,710	2,710	2,710	2,710	2,710	2,710

Standard errors in parentheses

As logistic regression coefficients are not readily interpretable, it is necessary to check the substantive effects of income inequality and its interaction with mobility presented in Table 1. Based on Model 1, we compute the predicted probability of voting while allowing only inequality to vary from their minimum to their maximum value. We also calculate the predicted probability of voting as the mobility variable changes from its minimum to maximum value. Figure 2 displays the results. Figure 2(a) confirms relative power theory; income inequality discourages electoral participation, all else equal. When the Gini Index increases from .32 to .65,

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

the predicted probability of individuals voting drops by about 7%. Interestingly, intergenerational income mobility turns out to have the opposite effect. Income mobility enhances the likelihood of voting by about 4%, as its value changes from the minimum (.45) to the maximum (.93) while holding other variables at their mean values.

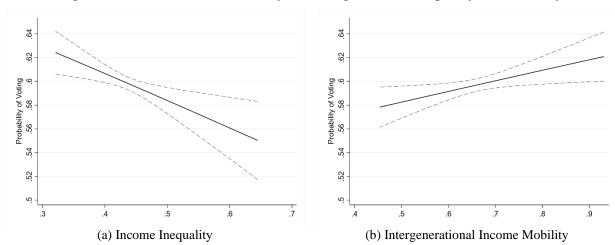
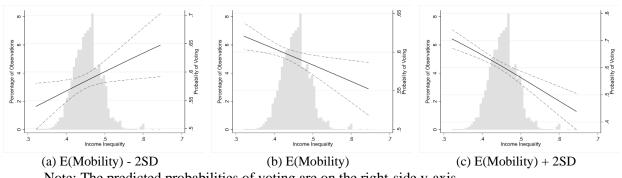


Figure 2. The Predicted Probability of Voting: Income Inequality and Mobility

As we focus on the conditional effects of mobility on the relationship between inequality and electoral participation, we expand Figure 2(a) with Model 2 to examine how the effects of income inequality on the voting probability change across different values of mobility by following the suggestions in dealing with multiplicative interaction terms (Brambor et al., 2006; Braumoeller, 2004; Solt et al., 2014). Figure 3 displays the results. It presents three sets of predicted probabilities by changing the mobility values from two standard deviations below the mean (.53) to two standard deviations above the mean (.81). The figure in the middle presents how the probability of voting changes as the degree of income inequality varies when intergenerational income mobility takes the mean value (.67).

Figure 3. The Effects of Inequality on the Predicted Probability of Voting: Conditional Effects of Mobility



Note: The predicted probabilities of voting are on the right-side y-axis.

Figure 3 provides strong evidence for our theoretical prediction that social mobility is an important contextual factor that mediates the effects of income inequality on electoral participation. When intergenerational income mobility is low, as presented in Figure 3(a), the probability of individuals' voting increases as income inequality goes up. The probability of voting is shown to increase by about 12% when income inequality rises from the minimum to the maximum value, while other values are held at their mean. This finding supports Hypothesis 1 that in an immobile society, as the distribution of income gets more and more polarized, individuals are activated politically, as suggested by conflict theory.

However, as mobility improves, the mobilizing effect of inequality begins to dissipate. As the mobility score approaches approximately .6, the positive impact of inequality on electoral participation disappears. As it goes up further and reaches the mean (.67), the effect of inequality becomes negative. Figure 3(b) indicates that, when intergenerational income mobility is at the mean, as income inequality increases from the minimum to the maximum value, the probability of voting decreases by about 7%. This could be interpreted in two different ways. One, it could be seen as evidence for relative power theory. In a society that is neither highly fluid nor rigid, income inequality depresses electoral participation. Two, it could also be seen as partial evidence for conflict theory: in a society that is neither fluid nor rigid, income inequality does not mobilize voter turnout. Unfortunately, we do not yet have a strong theoretical reason to support any particular interpretation in this context.

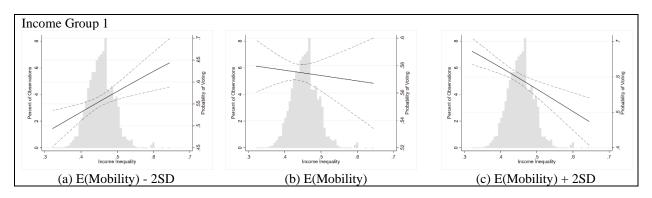
Figure 3(c) presents interesting results concerning Hypotheses 3 and 4. The demobilizing effect of income inequality becomes more prominent in a highly mobile society. We can expect a 26% drop in the probability of voting as income inequality rises from the minimum to the maximum value. This indicates that in a highly mobile society, as the distribution of income becomes more and more polarized, the electorate is demobilized. This finding requires more careful interpretation, as neither of the existing theories can fully explain it. At first glance, the negative slope seems to provide concrete support for relative power theory. However, it is problematic to interpret the finding in this way because we are looking at the effects of inequality conditioned by high social mobility. We believe this finding is more closely in line with Hypothesis 3 than Hypothesis 4. Hypothesis 3 suggests that because social mobility could offset the class anxiety and conflicts arising from inequality, income inequality does not politicize the electorate but rather dampens voter turnout. If Hypothesis 4 were to be supported, we should see a mobilizing effect of income inequality when there is high social mobility because the lower classes would not lack political efficacy or capacity for participation, while the upper classes would have a lot to lose by disengaging from politics. For this reason, we contend that our results give an upper hand to conflict theory over relative power theory when social mobility is considered.

To further test the validity of both theories, we run a three-way interaction model between inequality, mobility, and household income. The results are presented in both Model 3 and Model 6 of Table 1. By carefully following the guidance of Brambor et al. (2006) and Berry

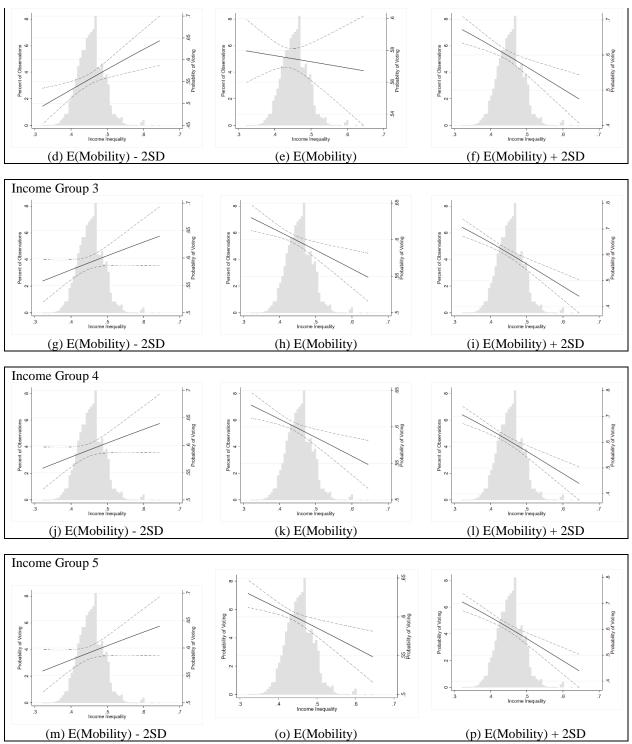
et al. (2012), we expand Figure 3 by calculating the predicted probability of voting across different values for respondents' income levels and the income mobility of the counties where they reside. Figure 4 displays the results. As Hypothesis 1 suggests, we see a clear mobilizing effect of income inequality when mobility is low. In particular, the changes in probabilities are statistically significant for lower-income groups (Figures 4a and 4d). However, as household income increases, the mobilizing effect of inequality begins to disappear. These results create the need to reconsider the theoretical mechanism of conflict theory, as inequality does not politicize upper-income groups but only lower-income groups.

As income mobility increases for each income group, we clearly see that the effect of income inequality on electoral participation begins to change dramatically. The results indicate that income inequality does not necessarily increase the likelihood of voting in a mobile society (Hypothesis 3) but instead significantly reduces it. Moreover, the decrease is almost identical across all income groups. Once again, these novel findings give more support to conflict theory than relative power theory, although neither of the theories can fully explain them. We discuss potential theoretical explanations of these further in the discussion section.

Figure 4 Inequality and the Predicted Probability of Voting: Conditional Effects of Mobility by Income Groups



Income Group 2



Note: The predicted probabilities of voting are on the right-side y-axis.

The results for the control variables are consistent with the existing studies. In compliance with the conventional SES model, income and education are found to be significant

factors in determining people's likelihood to vote. According to Table 1, the more income you have and the more educated you are, the more likely you are to vote. Concerning income, as discussed above, it might be important to capture an individual's place in the income hierarchy within his/her county of residence rather than absolute income. Thus, we recalculate relative income at the county level and re-estimate all of the models for a robustness check. This yields the same results, which are presented in Table A.3. Concerning race and partisanship, whites and partisans tend to vote more than racial minorities and independents. Age has a non-linear relationship with voting, indicating that individuals tend to vote more as they age, but when they get too old, their participation drops (Solt, 2008). Lastly, women turn out to be less participatory in voting than their male counterparts.

As for contextual controls, only county size, measured by population, is shown to affect voting positively. The Southern states and ethnic diversity decrease voting. Also, when more restrictive voter registration procedures are in place, measured as the tightness of registration deadline, citizens are less likely to turn out to vote. Those who reside in areas where U.S. House races are not competitive are less likely to vote than the voters in battleground areas. Lastly, while controlling for individual relative income, the median household income of the county does not affect the overall level of voting probability.

#### **Discussions**

The leading research about the relationship between income inequality and political participation has provided conflicting hypotheses and mixed empirical evidence. Addressing the confusion, this study offers a nuanced model by incorporating social mobility as a factor that mediates the influence of income inequality on electoral participation. This article theorizes that social mobility can alleviate the negative consequences that income inequality is believed to

have by depoliticizing the existing class cleavage, preventing the widening of efficacy gaps between classes, and bolstering public trust in meritocracy. Therefore, social mobility can mediate the inequality-frustration link assumed in conflict and relative power theories. The empirical analysis confirms our prediction: The effects of income inequality on citizens' likelihood of voting vary depending on a society's degree of social mobility.

Specifically, our analysis yields general support for conflict theory, although it uncovers some nuanced findings that the theory cannot explain perfectly. First, income inequality increases electoral participation when social mobility is low. When the distribution of income gets more polarized and chances of advancing in the social hierarchy get slimmer, people are mobilized to participate in politics. However, in contrast to the general expectations of conflict theory, inequality's mobilizing effect is not uniform across classes: it is shown to mobilize lower classes significantly, but no clear effect is found among upper classes. We need a better explanation of why the intensified class conflict and anxiety stirred up by the combination of inequality and immobility mobilize only the lower classes.

Second, as social mobility improves, this mobilizing effect of inequality dwindles, and after a certain threshold is reached—approximately the mean mobility score—inequality has a chilling effect on electoral participation. Moreover, inequality in a highly mobile society is shown to dampen electoral participation consistently across different income groups. We interpret this as more evidence for conflict theory than for relative power theory because inequality's demobilizing effect is a result of depoliticized class conflict and reduced motivation for collective action due to improved mobility. In short, this finding is considered an extension of conflict theory beyond what has been commonly examined in the literature.

However, we acknowledge that conflict theory cannot satisfactorily explain why inequality necessarily "depresses" the electoral participation of all classes. We propose two potential factors that might help explain this finding. First, we believe the answer lies in the concept of meritocracy. Ironically, income inequality combined with high income mobility could reinforce belief in the status quo while strengthening the idea of meritocracy. Low-income earners might internalize the economic anxieties about the unequal distribution of income in terms of the possibility of moving ahead in the future. For high-income earners, by contrast, the wage differentiation resulting from income inequality would strengthen the belief in the meritocratic system and defuse class-based political motivations. Given high social mobility, satisfaction with the status quo or acceptance of it problematizes income inequality at the individual level instead of politicizing it, dampening the electoral participation of all classes.

Second, people's belief about the future mobility of their society should play an important role in determining their response to inequality. If the majority of the electorate is skeptical that their society would remain mobile in the future and thus has a short-term time horizon, then it would lead them to put more weight on their current or short-term gains or losses. When both inequality and mobility are high, a short-term time horizon would motivate the wealthy to lock in where they are and the poor to fight to fix inequities. This, in turn, would make people more invested in politics. On the other hand, if the majority of the electorate believes that their society will remain open for an extended period, then people will attach less value to their current status and be able to take a long-term perspective. In this context, the lower classes would find the "prospect of upward mobility" (Benabou and Ok, 2001) more feasible, believing that they or their children might move up in the income distribution in the foreseeable future and thus leading them to better tolerate the short-term challenges brought by growing

income inequality. This would make collective action seem less attractive than individual effort as a method to improve one's economic condition (Stacey, 1966). The upper classes, on the other hand, might find it easier to set the political agenda and manipulate public opinion to their benefit. This is because high social mobility dilutes class consciousness and provides a fertile soil where "false consciousness" can easily grow. Consequently, these dynamics might work to suppress electoral participation.

Our analysis has important implications for our understanding of inequality and democracy. It has been long believed that economic inequality is inimical to democracy through various mechanisms, such as increased vulnerability to radical ideologies and intolerance (Lipset, 1960), reduced democratic regime support and legitimacy (Dahl, 1971), lack of solidarity and social capital (Uslaner and Brown, 2005), and political inequality—unequal participation and policy representation (Solt, 2008). However, our analysis indicates that the consequences of inequality could vary with context—in our case, with social mobility: when income inequality is combined with immobility, it motivates people to break their quiescence and act out, whereas income inequality with high mobility disincentivizes political engagement. We do not suggest that the worst economic situation is desirable because it increases democratic engagement in the electorate. However, we believe these results suggest a self-correcting mechanism in a democracy, where people calibrate economic inequities and determine whether and when to act to address them. Further, this may have to do with how people perceive inequality. Inequality may not invariably be perceived as unfair or unjust and invariably mobilizing the electorate to turn out—for instance, given a shared expectation of high mobility. Therefore, it is crucial to distinguish between income inequality and economic fairness when evaluating the impact of inequality on democracy.

Based on our discussion, we can identify a few points that warrant more scholarly attention. First, our study offers an analysis of one contextual variable that can intervene in the ways that inequality works. A more scholarly investigation should be pursued to incorporate contextual factors such as residential segregation, race/ethnicity, and gender inequality in probing the relationship between economic and political inequality. Second, it is not only past or current levels of mobility or inequality but also prospective ones that could influence political activism. For instance, the utility of voting as a remedy to rising inequality could be evaluated differentially based on the length of time horizon shared by the electorate. Third, it is necessary to examine whether and how, if so, social mobility affects upwardly and downwardly mobile individuals differently. There could be different dynamics whereby the upwardly and the downwardly mobile develop their political attitudes and behavior in the face of rising inequality (e.g., Breen, 2001; Daenekindt et al., 2018). We leave these for our future research agenda.

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Appendix

Table A.1. Summary Statistics

Variable	N	mean	SD	min	max
Vote validated turnout	236,738	0.589758	0.491879	0	1
Household income	236,738	2.87487	1.416956	1	5
Education	236,738	3.736375	1.459694	1	6
Age	236,738	50.18217	16.36797	18	98
$Age^2$	236,738	27.8616	16.29473	3.24	96.04
Female	236,738	0.523026	0.499471	0	1
White	236,738	0.741296	0.437923	0	1
Democrat	236,738	0.384831	0.486556	0	1
Republican	236,738	0.266485	0.442121	0	1
Ideology	236,738	3.081584	1.15554	1	5
Married	236,738	0.555082	0.4969578	0	1
Inequality	236,738	0.455398	0.03566	0.332	0.6254
Top 20 % income share	236,738	49.13529	3.208884	38.4	64.6
Top 5% income share	236,738	21.20023	2.695833	12.62	43.57
Mobility	236,738	0.676971	0.060158	0.45371	0.93123
Ln(Population)	236,738	12.87709	1.508914	8.23244	16.12785
Median income	236,738	10.92328	0.247767	9.850719	11.82238
Southern States	236,738	0.264567	0.441103	0	1
Diversity	236,738	0.376112	0.176055	0.00142	0.824956
Registration deadline	236,738	23.0175	7.920636	0	32
Margin of victory	236,738	0.30697	0.240093	0	1

Table A.2. Income Inequality and Income Mobility for Electoral Participation

	DV: Vote-validated Electoral Participation					
	Top 20%			Top 1%		
	Model 1	Model 2	Model 3	Model 4		
Inequality	-0.009***	0.120***	-0.616***	5.293***		
•	(0.004)	(0.030)	(0.192)	(1.771)		
Mobility	0.372**	9.692***	0.382**	1.351***		
	(0.164)	(2.148)	(0.164)	(0.332)		
Inequality $\times$ Mobility		-0.192***		-8.489***		
		(0.044)		(2.529)		
Household income	0.089***	0.089***	0.089***	0.089***		
	(0.004)	(0.004)	(0.004)	(0.004)		
Education	0.160***	0.160***	0.160***	0.160***		
	(0.003)	(0.003)	(0.003)	(0.003)		
Age	0.046***	0.046***	0.046***	0.046***		
_	(0.002)	(0.002)	(0.002)	(0.002)		
$Age^2$	-0.008***	-0.008***	-0.008***	-0.008***		
	(0.002)	(0.002)	(0.002)	(0.002)		
Female	-0.070***	-0.070***	-0.070***	-0.070***		
	(0.009)	(0.009)	(0.009)	(0.009)		
White	0.415***	0.415***	0.415***	0.415***		
	(0.011)	(0.011)	(0.011)	(0.011)		
Dem	0.280***	0.280***	0.280***	0.280***		
	(0.012)	(0.012)	(0.012)	(0.012)		
GOP	0.310***	0.310***	0.310***	0.310***		
	(0.013)	(0.013)	(0.013)	(0.013)		
Ideology	-0.023***	-0.023***	-0.023***	-0.023***		
	(0.005)	(0.005)	(0.005)	(0.005)		
Married	-0.011	-0.011	-0.011	-0.011		
	(0.010)	(0.010)	(0.010)	(0.010)		
Ln(population)	0.024***	0.028***	0.026***	0.023**		
<b>4</b> 1	(0.009)	(0.009)	(0.009)	(0.009)		
Ln(median income)	-0.032	-0.031	0.026	0.036		
,	(0.048)	(0.048)	(0.044)	(0.043)		
Southern states	-0.102***	-0.100***	-0.101***	-0.101***		
	(0.021)	(0.021)	(0.021)	(0.021)		
Diversity	-0.280***	-0.309***	-0.303***	-0.299***		
•	(0.065)	(0.065)	(0.064)	(0.063)		
Registration deadline	-0.002**	-0.002**	-0.002**	-0.002**		
	(0.001)	(0.001)	(0.001)	(0.001)		
Margin of victory	-0.071***	-0.071***	-0.071***	-0.071***		
	(0.022)	(0.022)	(0.022)	(0.022)		
Constant	-2.451***	-8.781***	-3.483***	-4.218***		
	(0.545)	(1.555)	(0.418)	(0.470)		
Observations	236,738	236,738	236,738	236,738		
Year fixed effects	Yes	Yes	Yes	Yes		
Number of counties	2,710	2,710	2,710	2,710		

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.3. Income Inequality and Mobility for Voting: County-level Relative Income

	DV: Vote-validated Electoral Participation				
	Gini Index	Gini Index	Top 5%	Top 5%	
	Model 1	Model 2	Model 3	Model 4	
Inequality	-0.123	17.679***	-0.001	0.183***	
	(0.374)	(3.466)	(0.004)	(0.047)	
Mobility	0.175	12.050***	0.178	5.871***	
•	(0.208)	(2.309)	(0.208)	(1.466)	
Inequality × Mobility		-26.259***		-0.273***	
		(5.083)		(0.070)	
Household income	0.097***	0.097***	0.097***	0.097***	
	(0.004)	(0.004)	(0.004)	(0.004)	
Education	0.184***	0.184***	0.184***	0.184***	
	(0.004)	(0.004)	(0.004)	(0.004)	
Age	0.043***	0.043***	0.043***	0.043***	
	(0.002)	(0.002)	(0.002)	(0.002)	
$Age^2$	-0.003	-0.003	-0.003	-0.003	
Ç	(0.002)	(0.002)	(0.002)	(0.002)	
Female	-0.097***	-0.097***	-0.097***	-0.097***	
	(0.010)	(0.010)	(0.010)	(0.010)	
White	0.415***	0.415***	0.415***	0.415***	
	(0.011)	(0.011)	(0.011)	(0.011)	
Dem	0.405***	0.406***	0.405***	0.405***	
	(0.011)	(0.011)	(0.011)	(0.011)	
GOP	0.387***	0.387***	0.387***	0.387***	
	(0.012)	(0.012)	(0.012)	(0.012)	
Ideology	-0.000**	-0.000***	-0.000**	-0.000***	
23	(0.000)	(0.000)	(0.000)	(0.000)	
Married	-0.023**	-0.023**	-0.023**	-0.023**	
	(0.010)	(0.010)	(0.010)	(0.010)	
Ln(population)	0.015	0.017	0.014	0.015	
<b>4</b> 1 /	(0.014)	(0.014)	(0.014)	(0.014)	
Ln(median income)	0.066	0.069	0.071	0.075	
,	(0.055)	(0.055)	(0.052)	(0.051)	
Southern states	-0.095***	-0.094***	-0.095***	-0.093***	
	(0.025)	(0.024)	(0.025)	(0.025)	
Diversity	-0.344***	-0.375***	-0.348***	-0.372***	
•	(0.081)	(0.081)	(0.080)	(0.079)	
Registration deadline	-0.001	-0.001	-0.001	-0.001	
C	(0.001)	(0.001)	(0.001)	(0.001)	
Margin of victory	-0.032	-0.034	-0.033	-0.033	
•	(0.023)	(0.023)	(0.023)	(0.023)	
Constant	-3.829***	-11.933***	-3.919***	-7.799* <sup>*</sup> *	
	(0.611)	(1.685)	(0.526)	(1.120)	
Observations	225,775	225,775	225,775	225,775	
Year fixed effects	Yes	Yes	Yes	Yes	
Number of counties	1,125	1,125	1,125	1,125	

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.4. Income Inequality and Mobility for Voting: Percentage of Black

	DV: Vote-validated Electoral Participation					
	Gini Index	Gini Index Gini Index		Top 5%		
	Model 1	Model 2	Model 3	Model 4		
Inequality	-1.011***	14.027***	-0.006*	0.128***		
•	(0.319)	(2.766)	(0.004)	(0.034)		
Mobility	0.208	10.068***	0.210	4.265***		
	(0.176)	(1.812)	(0.177)	(1.037)		
Inequality × Mobility		-22.228***		-0.200***		
•		(4.062)		(0.050)		
Household income	0.089***	0.089***	0.089***	0.089***		
	(0.004)	(0.004)	(0.004)	(0.004)		
Education	0.160***	0.160***	0.160***	0.160***		
	(0.003)	(0.003)	(0.003)	(0.003)		
Age	0.046***	0.046***	0.046***	0.046***		
	(0.002)	(0.002)	(0.002)	(0.002)		
$Age^2$	-0.008***	-0.008***	-0.008***	-0.008***		
	(0.002)	(0.002)	(0.002)	(0.002)		
Female	-0.070***	-0.070***	-0.070***	-0.070***		
	(0.009)	(0.009)	(0.009)	(0.009)		
White	0.415***	0.414***	0.415***	0.415***		
	(0.011)	(0.011)	(0.011)	(0.011)		
Dem	0.280***	0.281***	0.280***	0.281***		
	(0.012)	(0.012)	(0.012)	(0.012)		
GOP	0.309***	0.310***	0.310***	0.310***		
	(0.013)	(0.013)	(0.013)	(0.013)		
Ideology	-0.023***	-0.023***	-0.023***	-0.023***		
2,	(0.005)	(0.005)	(0.005)	(0.005)		
Married	-0.011	-0.011	-0.011	-0.011		
	(0.010)	(0.010)	(0.010)	(0.010)		
Ln(population)	0.017*	0.021**	0.010	0.011		
4 1	(0.009)	(0.009)	(0.009)	(0.008)		
Ln(median income)	-0.065	-0.067	-0.017	-0.018		
,	(0.049)	(0.048)	(0.046)	(0.045)		
Southern states	-0.097***	-0.089***	-0.097***	-0.092***		
	(0.022)	(0.021)	(0.022)	(0.022)		
Percentage of Black	-0.358***	-0.498***	-0.395***	-0.454***		
	(0.084)	(0.088)	(0.083)	(0.084)		
Registration deadline	-0.002**	-0.002**	-0.002**	-0.002**		
C	(0.001)	(0.001)	(0.001)	(0.001)		
Margin of victory	-0.070***	-0.070***	-0.072***	-0.072***		
3	(0.022)	(0.022)	(0.022)	(0.022)		
Constant	-1.953***	-8.651***	-2.702***	-5.431***		
	(0.535)	(1.337)	(0.458)	(0.826)		
Observations	236,738	236,738	236,738	236,738		
Year fixed effects	Yes	Yes	Yes	Yes		
Number of counties	2,710	2,710	2,710	2,710		

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.5. Income Inequality and Income Mobility for Electoral Participation: Three-level MLM

	Gini Index	Gini Index	Top 5%	
	Model 1	Model 2	Model 3	Top 5% Model 4
Inequality	0.329	9.770***	0.009**	0.117***
	(0.301)	(0.996)	(0.004)	(0.029)
Mobility	0.096	6.377***	0.123	3.420***
$Inequality \times Mobility$	(0.167)	(0.620) - <b>13.985</b> ***	(0.167)	(0.905) - <b>0.162***</b>
TT 1 11'	0.000444	(1.347)	0.000***	(0.044)
Household income	0.089***	0.089***	0.089***	0.089***
Edward's a	(0.004)	(0.004)	(0.004)	(0.004)
Education	0.160***	0.160***	0.160***	0.160***
A	(0.003)	(0.003)	(0.003)	(0.003)
Age	0.046***	0.046***	0.046***	0.046***
A ===2	(0.002) -0.007***	(0.002)	(0.002) -0.007***	(0.002)
$Age^2$		-0.007***		-0.007***
Famala	(0.002) -0.071***	(0.002) -0.072***	(0.002) -0.071***	(0.002) -0.071***
Female				
W/la:4a	(0.009)	(0.009) 0.416***	(0.009)	(0.009)
White	0.415***		0.416***	0.416***
Dam	(0.011)	(0.011) 0.287***	(0.011)	(0.011)
Dem	0.285***		0.286***	0.286***
COR	(0.012)	(0.012)	(0.012)	(0.012)
GOP	0.318***	0.318***	0.317***	0.318***
T1 1	(0.013)	(0.013)	(0.013)	(0.013)
Ideology	0.023***	0.023***	0.023***	0.023***
N 1	(0.005)	(0.005)	(0.005)	(0.005)
Married	-0.008	-0.008	-0.008	-0.007
* /	(0.010)	(0.010)	(0.010)	(0.010)
Ln(population)	0.0001	0.005	-0.003	-0.0001
•	(0.009)	(0.010)	(0.009)	(0.009)
Ln(median income)	0.247***	0.247***	0.249***	0.247***
	(0.044)	(0.053)	(0.044)	(0.045)
Southern states	-0.061***	-0.059***	-0.066***	-0.063***
	(0.022)	(0.022)	(0.022)	(0.022)
Diversity	-0.335***	-0.359***	-0.321***	-0.344***
	(0.069)	(0.069)	(0.067)	(0.067)
Registration deadline	-0.005***	-0.004***	-0.004***	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Margin of victory	-0.120***	-0.122***	-0.120***	-0.122***
	(0.026)	(0.026)	(0.026)	(0.026)
Constant	-5.513***	-9.817***	-5.555***	-7.763***
	(0.483)	(0.790)	(0.438)	(0.711)
Observations	236,738	236,738	236,738	236,738
Number of counties	2,710	2,710	2,710	2,710

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.6. Income Inequality and Income Mobility for Electoral Participation: State-level MLM

	DV: Vote-validated Electoral Participation					
	Gini Index	Gini Index	Top 5%	Top 5%		
	Model 1	Model 2	Model 3	Model 4		
Inequality	-0.929***	13.478***	-0.011***	0.169***		
	(0.181)	(1.623)	(0.002)	(0.021)		
Mobility	-1.411***	8.289***	-1.407***	4.265***		
Y 10 37 190	(0.121)	(1.093)	(0.121)	(0.666)		
Inequality $\times$ Mobility		-21.004***		-0.264***		
Household income	0.089***	(2.352) 0.089***	0.089***	(0.030) 0.089***		
Household income	(0.004)	(0.004)	(0.004)	(0.004)		
Education	0.162***	0.162***	0.162***	0.162***		
Education	(0.003)	(0.003)	(0.003)	(0.003)		
Age	0.046***	0.046***	0.046***	0.046***		
	(0.002)	(0.002)	(0.002)	(0.002)		
$Age^2$	-0.007***	-0.007***	-0.007***	-0.007***		
8-	(0.002)	(0.002)	(0.002)	(0.002)		
Female	-0.068***	-0.069***	-0.068***	-0.069***		
	(0.009)	(0.009)	(0.009)	(0.009)		
White	0.412***	0.413***	0.412***	0.413***		
	(0.011)	(0.011)	(0.011)	(0.011)		
Dem	0.277***	0.278***	0.277***	0.278***		
	(0.011)	(0.011)	(0.011)	(0.011)		
GOP	0.308***	0.308***	0.308***	0.309***		
	(0.013)	(0.013)	(0.013)	(0.013)		
Ideology	-0.025***	-0.024***	-0.024***	-0.024***		
	(0.005)	(0.005)	(0.005)	(0.005)		
Married	-0.014	-0.013	-0.014	-0.013		
	(0.010)	(0.010)	(0.010)	(0.010)		
Ln(population)	-0.011**	-0.011*	-0.010*	-0.011*		
T / 1' '	(0.006)	(0.006)	(0.006)	(0.006)		
Ln(median income)	0.076***	0.074***	0.099***	0.094***		
Couthous states	(0.028)	(0.028) -0.173**	(0.026) -0.176**	(0.026) -0.172**		
Southern states	-0.180** (0.082)	(0.081)	(0.082)	(0.081)		
Diversity	-0.170***	-0.210***	-0.198***	-0.228***		
Diversity	(0.049)	(0.049)	(0.048)	(0.048)		
Registration deadline	0.002	0.002	0.002	0.002		
Registration deadine	(0.001)	(0.001)	(0.001)	(0.001)		
Margin of victory	-0.085***	-0.079***	-0.087***	-0.082***		
	(0.021)	(0.021)	(0.021)	(0.021)		
Constant	-2.110***	-8.756***	-2.545***	-6.364***		
J	(0.308)	(0.805)	(0.272)	(0.518)		
Observations	236,738	236,738	236,738	236,738		
Number of states	230,738 49	230,738 49	230,738 49	230,738 49		
TAUTHOCI OF STATES	47	47	47	47		

Standard errors in parentheses
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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