

Two

Demographics of Turnout

Our interest in this chapter is whether changes in demographics and changes in the distribution of income in the American electorate (i.e., those who are eligible to vote) are also reflected in the composition of the voters (i.e., those who actually cast ballots). We focus primarily on how the turnout rates of different demographic groups have changed, or not changed, over time, and the extent to which voters in 2008 are more or less descriptively representative of the electorate than voters were in 1972. Of special interest, given the notable increase in economic inequality and the well-established relationship between socioeconomic status and voter turnout, is whether the voting population overrepresents the wealthy (relative to the poor) more today than it did in 1972.

Demographics remain today, as they were in 1972, major components of analyses regarding the determinants of mass political behavior in the United States. Whether drawing on the intellectual traditions of the Columbia school established by Lazarsfeld, Berelson, and Gaudet in *The People's Choice* (1948) or the Michigan model pioneered by Campbell, Converse, Miller, and Stokes in *The American Voter* (1960), scholars have consistently demonstrated the importance of socioeconomic status, race, ethnicity, gender, age, and marital status as predictors of numerous aspects of electoral behavior and public opinion.

But the demographics of the United States have changed dramatically since the time of Wolfinger and Rosenstone's seminal work on voter turnout in the 1972 presidential election. The civilian population has increased from fewer than 208 million people in 1972 to over 303 million

people in 2008.¹ The proportion of Anglos (non-Hispanic whites) declined from 83.2 percent of the population in 1970 to 65.6 percent in 2008.² And the proportion of African Americans in the population increased from 11.1 percent of the population in 1972 to approximately 13 percent of the population in 2008, while the proportion of Hispanics (of any race) has increased from 5.7 percent in 1970 to 15.4 percent in 2008.³

At the same time, the proportion of noncitizens in the voting-age population has increased substantially. In 1972 less than 2 percent of the voting age population were not citizens, but in 2008 8.4 percent of the voting-age population were not citizens.⁴ McDonald & Popkin (2001) discuss additional requirements for voting eligibility and argue that in addition to citizenship, increasing numbers of institutionalized individuals as well as the greater number of states disenfranchising convicted felons has led to a larger percentage of voting-ineligible individuals in 2008 compared to 1972. Whereas the number of persons ineligible for these reasons was very small in 1972, it was over 1 percent of the voting age population in 2008.⁵

Changes in the size of various demographic groups since 1972 have also been accompanied by changes in economic status. Median income in 1972, all races combined, was \$21,800, compared to \$26,800 in 2008.⁶ But change in the median income of women, compared to men, has been substantially greater: for women over the age of fifteen, the median income in 1972 was \$12,100, compared to \$21,00 in 2008. In contrast, the median income of men over the age of fifteen actually decreased from \$34,700 in 1972 to \$33,600 in 2008.⁷

1. Total population figures from U.S. Census Bureau, 2011, Statistical Abstract, table 2. These numbers exclude armed forces personnel.

2. Proportion of Anglos for 2008 from U.S. Census Bureau, 2012 Statistical Abstract, table 6: Resident Population by Sex, Race, and Hispanic-origin Status: 2000–2009; proportion of Anglos for 1970 calculated from U.S. Census data.

3. Proportion of blacks and Hispanics for 2008 from U.S. Census Bureau, 2012 Statistical Abstract, table 6: Resident Population by Sex, Race, and Hispanic-Origin Status: 2000–2009; proportion of blacks for 1970 calculated from Gibson and Jung (2002, table 1).

4. For data on the proportion of noncitizens among the voting-age population, see McDonald (2011).

5. For data on the proportion of ineligible persons among the voting-age population, see McDonald (2011).

6. All incomes reported in these comparisons between 1972 and 2008 are in constant 2010 dollars, in this and the following two paragraphs. All figures are rounded to the nearest hundred dollars.

7. Median income data in this and the following paragraph on individuals over the age of sixty-five are taken from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, table P-8AR: Age—People, All Races, by Median Income and Sex: 1947 to 2010.

Men over the age of sixty-five have fared much better. In 1972, the median income of men age sixty-five and over was \$17,500 in constant 2010 dollars; in 2008, it had risen to \$25,800. The income gains of women over the age of sixty-five were not as great, with their median income increasing from \$8,900 in 1972 to \$14,700 in 2008. Aside from these gender differences, however, it is clear that, as a group, income of individuals over age sixty-five has risen since 1972.

Among racial and ethnic groups, blacks have experienced the greatest proportional increase in median income, from \$15,900 in 1972 to \$22,200 in 2008. While whites' median income increased from \$23,000 to \$29,400 in 2008, Hispanics' median income increased only slightly, from \$18,300 in 1974 (1972 data not available) to \$21,000 in 2008.⁸

2.1 Measuring Voter Turnout

Our analyses in this and subsequent chapters primarily rely on three national survey sources, all of which include questions that ask individuals (or informants) whether they voted in the most recent election. The Current Population Survey (CPS), conducted by the U.S. Bureau of the Census, is a monthly survey of approximately 50,000 households. Respondents are asked about behavior of other household members, providing information on approximately 90,000 individuals per month.⁹ In November of even-numbered years, the CPS includes a short battery of questions on voter participation. In particular, respondents are asked whether or not they voted in that month's election, and whether or not they were registered. It is the especially large sample size that makes the CPS a valuable resource in studying voter turnout (see appendix 2.1). Along with the overall smaller sampling error, the sample includes enough people at different levels of education and income to accurately note differences across time in the participation of subgroups of interest of the population. And finally, the CPS has a substantially smaller

8. The data reported for whites for 1972 are not reported for white non-Hispanics, while the data reported for 2008 are restricted to white Non-Hispanics because the census did not include a Hispanic origin question until after 1972. Given the relatively small proportion of Hispanics in the United States in 1972, we believe that this comparison for median income is fairly accurate. Median income data by race and Hispanic origin are taken from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, table P-4. Race and Hispanic Origin of People (Both Sexes Combined) by Median and Mean Income: 1947 to 2010.

9. We will refer to the 90,000 as *respondents*, though technically only those directly interviewed are truly survey respondents.

nonresponse rate than both academic surveys and surveys conducted by news organizations. In an era when voters and nonvoters are increasingly difficult to contact, the high quality of the CPS survey makes it an invaluable resource for studying turnout.

However, the CPS is limited to demographic characteristics and cannot be used to study other important determinants of voter turnout such as political preferences, attitudes, or psychological orientations. The CPS thus cannot be used to assess the consequences of who votes with respect to the representation of policy preferences. For these purposes, then, in later chapters we turn to the American National Election Study (NES) and the National Annenberg Election Study (NAES), both of which include a wide range of questions regarding demographics, attitudes, political preferences and voting behavior. The NES, a biennial survey of 1,000–2,000 U.S. citizens, provides the advantage of having time-series data on many of these questions, and provides us with the opportunity to assess electoral changes over time. Alternatively, the NAES includes a wider range of policy preferences, has larger sample sizes on some questions, and (unlike the NES) includes noncitizens in its sampling frame. We thus use the 2004 NAES to provide some additional validation of our findings based on the more standard NES surveys. Detailed question wording from the NES and NAES is provided in appendix 6.1.

One possible limitation of using any of these self-reports of voter turnout is that individuals may fail to accurately report their past behavior. Whether unintentionally or intentionally misreporting, the concern with self-reports is that they might introduce systematic measurement error in our estimates of voter turnout. This is not an issue if different demographic groups have approximately equal rates of misreporting. But if, for example, high-income individuals are more likely to overreport than are low-income individuals, then any inferences we can make with respect to differences across income groups are compromised.

This potential problem has been addressed by numerous scholars using comparisons of self-reported turnout in the NES with validated turnout (i.e., where the NES confirmed or disconfirmed respondents' self-reports by using official county-level voting records). These comparisons are available for the NES for the 1976 through 1988 surveys. Previous research comparing the reported and validated vote in the NES suggests, indeed, that higher-status individuals are more likely to overreport than are lower-status individuals, in part because they are more sensitive to the norm of voting as expected of "good citizens" (Granberg & Holmberg 1991; Hill & Hurley 1984; Silver, Anderson, Abramson 1986). These studies also report that there are significant differences in misreporting rates between blacks and whites, with blacks being more likely to

overreport voting. Whether such patterns are the same for the 1990s and early 2000s is not clear.¹⁰

However, there is some evidence to suggest that the NES-validated vote measures also have systematic shortcomings and should be used cautiously. Traugott (1989) examines the NES validated turnout measures, for example, and reports that in some years the proportion of records where insufficient information was provided to attempt validation was as high as 15 percent (Traugott 1989; Traugott, Traugott, & Presser 1992). Also, recent research suggests that misreporting rates may be less of a problem than previously claimed (Berent, Krosnick, & Lupia 2011).¹¹ The necessary assumption that we need to make for our inferences documenting changes over time in relative turnout rates of different demographic groups is that differences in misreporting rates across demographic groups are stable over the time period examined.¹²

Our analyses in this chapter and chapter 3 rely on the CPS self-reported turnout measure because we are primarily interested in demographic changes over time—and we have no reason to believe that misreporting rates are not stable over time.¹³ Our primary measure of turnout in this chapter is a measure of the turnout of citizens in the voting-age population (CVAP), as is typically done in analyses of registration and turnout rates.¹⁴

However, with the increase in the noncitizen population over this time period, analyzing only citizens could mask differences between voters and the general voting-age population, a set of nonvoters that includes those who choose not to vote and those who legally cannot vote. Since we are interested in knowing how descriptively representative voters are, this second comparison provides useful information. Thus, we also use the CPS survey data to compute a second measure of turnout, based on the

10. On the validity of the aggregate NES self-report estimates of voter turnout over time, see Burden (2000) and McDonald (2003).

11. While Katz & Katz (2010) suggest a method to correct survey misreports with other survey data, we would need to have validated survey data from each election year and assume the misreporting mechanism is similar across surveys as different as the CPS and the NES.

12. Bernstein, Chadha, & Montjoy (2003) find that misreporting rates across states are stable over the period they analyze: 1980 to 2000.

13. In chapter 6, where we use the NES self-reported vote, we also briefly discuss findings based on the NES validated vote for the years in which it is available, 1976–88. However, given the few years in which it is available, as well as the various problems with the validated vote measures identified by Traugott (1989), we do not believe that this alternative measure is clearly superior to the self-reported vote for our purposes.

14. Because the CPS is a survey of households, the sample is restricted to persons who are not incarcerated at the time of the survey. It thus includes people who are prohibited from voting based on a felony conviction but are not incarcerated.

Table 2.1. Estimates of Voter Turnout in Presidential Elections, 1972–2008.

	CPS CVAP ^a	CPS VAP ^b	NES CVAP ^c	McDonald VAP ^d	McDonald VEP ^e
1972	64.6	63.0	72.8	55.2	56.2
1976	63.6	61.6	71.6	53.5	54.8
1980	63.9	61.3	71.4	52.6	54.2
1984	65.0	62.1	73.6	53.3	55.2
1988	62.4	58.9	69.7	50.3	52.8
1992	65.5	61.3	75.1	54.7	58.1
1996	58.4	54.2	72.9	48.1	51.7
2000	59.5	54.7	72.7	50.0	54.2
2004	63.8	58.3	76.6	55.4	60.1
2008	63.6	58.2	77.6	56.9	61.6

^a Self-reported turnout of citizens computed by the authors from the Current Population Survey for each year. Individuals coded as *Don't Know, No Response, or Refused* by the Census Bureau are treated as having not voted.

^b Self-reported turnout of voting-age population computed by the authors using data from the Current Population Survey, 1972–2008.

^c Self-reported turnout of citizens computed by the authors using data from the American National Election Studies Time Series Cumulative Data File, 1972–2008.

^d Turnout rate of voting-age population based on vote for highest office as computed by McDonald (2011). Data for 1972 and 1976 are from McDonald and Popkin (2001); data for 1980–2000 are available at http://elections.gmu.edu/voter_turnout.htm.

^e Turnout rate of voting-eligible population based on vote for highest office as computed by McDonald (2011). Data for 1972 and 1976 are from McDonald and Popkin (2001); data for 1980–2000 are available at http://elections.gmu.edu/voter_turnout.htm.

voting-age population (VAP). In this measure we include noncitizens in the denominator when we compute turnout.¹⁵

Our estimates of voter turnout between 1972 and 2008 are reported in table 2.1, which includes three measures based on self-reports or informant reports in surveys: the reported CVAP and VAP measures from the CPS, and the self-reported measure from the NES. Table 2.1 also includes two turnout measures based on official reports of the number of ballots cast: *voting-age* and *voting-eligible* turnout, as calculated by McDonald (2011). McDonald uses official totals for ballots cast, and the best available estimates of the voting-age population in the states to estimate the first measure. He then adjusts the denominator for the number of noncitizens in each state, as well as other individuals ineligible to vote to generate the second measure.¹⁶

15. As with our CVAP measure, our VAP measure does not include *currently* institutionalized felons ineligible to vote in the denominator; it thus somewhat overstates the turnout of the voting-age populations.

16. Other individuals ineligible to vote include disenfranchised felons; see McDonald (2011).

As expected, the estimate of turnout is always larger by approximately three to six percentage points when the measure is restricted to citizens (i.e., the CVAP vs. the VAP). This difference, however, is greater in more recent years as the number of noncitizens in the United States has increased. According to McDonald's estimates, over 8 percent of the voting-age population in the United States in 2008 were not citizens. Thus, including those noncitizens in the denominator will immediately reduce any computed turnout rate quite substantially.

Between 1972 and 2008, the turnout of citizens in the United States was higher in some elections than others, ranging from a low of 58.4 percent in 1996 to a high of 65.5 percent in 1992. However, there is no downward trend in the data, as many have claimed previously (e.g., Miller 1980; Reiter 1979; Rosenstone & Hansen 1993; Teixeira 1992). When we look at turnout of the population including noncitizens, we see that 1972 had the highest level of reported turnout, with turnout generally declining since then. Again, this follows from the arithmetic: with an increase in noncitizens (i.e., people not eligible to vote), the denominator in this calculation is simply increasing faster than the numerator.

Our NES self-report measure also suggests that turnout has either increased or stayed the same since 1972. Given the exclusive focus of the NES on political and social issues (and the resulting sample bias toward more highly educated, politically engaged individuals), the NES self-report estimate is higher than both of the CPS estimates. Since 1996, the NES self-report has provided a substantially higher estimate than the CPS CVAP self-report (a difference of over seventeen percentage points in 1996).¹⁷

Each of these three survey measures (NES, VAP, and CVAP) are all much higher than the "official" rate based on ballots cast as reported by state officials. However, we note that despite the use of the term, there is no "official" turnout rate for the United States. While the various state governments certify how many votes were cast for each election, they simply do not know with certainty the number of citizens eligible to vote. Thus, any measure of turnout is by necessity based on an estimate of the eligible (or voting-age) population, and even the "official" turnout numbers cannot be used as an independent benchmark to demonstrate the inaccuracy of the survey measures.

While none of these measures is without error, what we see is that none of these survey measures reflect a trend of decreasing voter turnout among voting-age citizens over time. This is an important point, as much

17. See Traugott (1989) and Berent, Krosnick, & Lupia (2011) for analyses of why NES-reported turnout is so high.

has been made of an alleged decline in U.S. voter turnout since 1972. However, our results are consistent with the analysis of McDonald and Popkin (2001), which showed that when looking at the turnout of voting-age *citizens* there has been no decrease in turnout.

2.2 Measuring Socioeconomic Status

Our major focus on the demographics of turnout is on socioeconomic status, though we also consider race/ethnicity, age, gender, and marital status in some detail (see appendix 2.1 on question wording and response categories for each of these variables). We conceptualize socioeconomic status as reflecting the resources and opportunities available to individuals to interact and engage politically, socially, and economically; individuals with higher status have greater resources to assume the costs of such behaviors, and also have more ways to participate in these spheres.

Wolfinger and Rosenstone's detailed analysis of education, income, and occupation as determinants of voter turnout, however, led them to conclude that there is no generic status variable related to voter turnout (1980, 34–35). That is, while education was strongly and positively related to voter turnout in 1972, the relationship between income and turnout was much weaker, and was unrelated to voter turnout once an individual achieved a threshold of financial security. Occupational status was not associated with voter turnout at all in 1972; instead, occupational differences reflected particular attributes or characteristics of the occupation (e.g., its reliance on the government).

Largely as a result of these empirical findings, the standard analytical approach in most studies of voter turnout over the past several decades has been to rely primarily on education and income (but not occupation) as indicators of socioeconomic status. We follow such a practice here in order to be consistent with this earlier work.

As we have argued earlier (Leighley & Nagler 1992b, 727, 730–32), education, income, and occupation as measures of class are plagued with measurement error, a key reason for some of the conflicting findings reported in previous research on class bias over time. Occupation is especially troublesome with respect to categorizing particular jobs as either white collar or blue collar, as well as with respect to temporal validity (made all the worse in the CPS by a notable coding change in 1970). In addition, the distinctive attributes of particular professions with respect to those dimensions that Wolfinger and Rosenstone (1980) identified as relevant to voter turnout are especially difficult, if not impossible, to measure reliably over time.

We continue to believe that income is the most meaningful available measure of socioeconomic status to use in studies of turnout. Income is the most widely used and recognized demographic criteria by which government distributes benefits and therefore seeks to influence social and economic life. Thus, if poor people do not vote, they could find economic policy being written in ways that disadvantage them. However, if poorly educated people do not vote they would not be likely to find government policy explicitly written to disadvantage them, *as government policy does not generally mention one's level of education*. And this relationship of government policy to income happens both at the spending end (through means-tested benefits programs) and the taxing end through a tax code that sets different rates for people at different income levels. Thus we proceed to primarily focus on *income bias*, rather than *socioeconomic class bias*.

Our measure of individuals' income over time is not the discrete income category into which the individual is categorized but instead reflects where the individual is relative to the entire income distribution in a given year. We do this in part because in each year the CPS arbitrarily defines a set of income categories, and the size and range of these categories varies a great deal over the time period of interest.

We measure income in each year by assigning individuals to one of five income groups (i.e., quintiles), combining the CPS income categories for each year. As the categories do not map perfectly into quintiles (i.e., the first several CPS income categories may yield slightly more or slightly less than 20 percent of the respondents), we randomly assign people in overlapping categories into quintiles so that each quintile represents 20 percent of the distribution.¹⁸ By assigning individuals' self-reports of income to one of these five quintiles in each year between 1972 and 2008, we use a more meaningful measure of income over time, and thus one that allows us to draw more meaningful inferences about the relationship between income and voter turnout.¹⁹ As quintiles are a standard reporting unit for income measures, our individual-level measure is thus comparable to aggregate-level measures of income change.²⁰

18. In earlier work (Leighley & Nagler 1992b) we did not smooth out the quintiles generated by CPS categories, leading to criticism that they were not comparable over time (Freeman 2004). With the procedure we use here the quintiles are comparable over time.

19. Note that in the multivariable estimates that follow based on cross-sectional data, this coding has no effect. However, it is critical for comparability of estimates across years.

20. Much of the recent change in the income distribution has been *within* the top quintile. However, we do not see much efficacy in examining the turnout rate of the top 1 percent of the income distribution, because even if they all voted, they would still only have 1 percent of the vote.

Conceptually, education reflects the skills and information gained by individuals and, though it is typically achieved at relatively early stages of life, has been documented to determine a host of life chances, including income level and occupation type. This likely reflects another key aspect of education as a measure of status: it is closely linked to family background. Individuals with higher levels of education are more likely to come from families with higher levels of education. Levels of education also likely reflect attitudinal characteristics of individuals who seek to achieve more education or who become more engaged in politics because they have basic information about interests and issues.

As Nie, Junn, and Stehlik-Barry (1996) and Tenn (2005) argue, the meaning of education has changed over time. Someone with a college degree in 1972 was much rarer than someone with a college degree in 2008 (12.0 percent vs. 29.4 percent of people over twenty-five years of age, respectively), and someone who failed to graduate from high school was rarer in 2008 than 1972 (13.4 percent vs. 41.8 percent, respectively).²¹ Comparisons of the level of education over time badly conflate selection into education with level of education. Thus for education, too, a measure of relative education is more suitable for testing differences in the effects of education over time. We measure education not by the number of years of formal schooling attained (as is usually done) but instead by assigning each individual to one of three categories representing the education distribution in each year (i.e., bottom third, middle third, top third).²²

2.3 Measuring Race and Ethnicity

As scholars of racial/ethnic politics are well aware, thorough data on race and ethnicity are rarely available, even in the case of the U.S. Census. Until recently, "ethnicity," in Census Bureau terms, refers to identifying as Hispanic or Latino, while "race" refers to identifying as white, black, or African American, American Indian/Alaska Native, Asian, or Native Hawaiian or other Pacific Islander. Individuals identifying as Hispanic or Latino can also identify as belonging to any racial category.

21. U.S. Census Bureau, Current Population Survey, table A-2: Percent of People 25 Years and Over Who Have Completed High School or College, by Race, Hispanic Origin and Sex: Selected Years 1940 to 2012; accessed October 25, 2011, at <http://www.census.gov/hhes/socdemo/education/data/cps/historical/tabA-2.xls>.

22. As with income, when CPS education categories do not allow us to precisely determine which third of the income distribution a respondent is in, we use random assignment.

Our analyses focus primarily on three racial/ethnic groups: Anglos (i.e., non-Hispanic whites); African Americans (non-Hispanic blacks); and white Hispanics, because these are the three largest and most commonly politically identified groups during the period of analysis.²³ The large size of each of these groups throughout the period allows us to draw more accurate inferences regarding changes in the relationship between these demographic characteristics and voter turnout. We do not distinguish between Hispanics on the basis of their native origin due to our inability to maintain consistency over time. Thus, our description of Hispanic turnout, and our conditional comparisons of Hispanic turnout and Anglo turnout, are all averages over the full set of Hispanics.²⁴

Even focusing on only these three groups is challenging because of changes in question wording over the study period. The Current Population Survey did not include a "Hispanic Origin" (i.e., ethnicity) question until 1976, and so our analysis of ethnicity and voter turnout is restricted to the 1976–2008 time period. In 2000 the response categories of this question were revised to "Hispanic or Latino Origin" and "Not Hispanic or Latino."

The CPS has also revised its question wording regarding race over the period of our analysis. From 1972 to 1988 there is a consistent coding of white, black, and "other." From 1992 through 2000 individuals could identify as one of four races: white; black; American Indian or Alaskan Native; and Asian or Pacific Islander. The category "other" included everyone else. In 2004, a new set of response categories was provided, and for the first time respondents were allowed to select one or more races when they self-identified, and they could also choose a sixth racial category, "some other race." However, the entire set of new 2004 categories comprised less than 2 percent of choices of respondents over 2004 and 2008. So the effect on our analyses of the additional categories is likely to be small.

23. We use the term *Hispanic* to refer to those who identified as either Hispanic or Latino. Because conventional census and scholarly and popular terminology for different racial and ethnic groups has changed over our period of study, we use related terms interchangeably (e.g., *black* and *African American*, or *Hispanic* and *Latino*), but try to use the terminology that most closely matches that used in the data sources upon which we rely. When there are changes over time, and we are referring to the entire period, we typically use the more recent terminology. For coding purposes, those listing multiple races were coded as "other" in 2004 and 2008.

24. See Highton & Burris (2002) on the differences in turnout rates among Hispanics of different national origin.

2.4 Demographics of Turnout, 1972–2008 (CPS)

We begin our analysis of voter turnout in presidential elections by examining differences in turnout rates by education, income, race/ethnicity, age, gender, and marital status. We do this to answer the fundamental question of descriptive representation: does the set of individuals who cast ballots share the same distribution on demographic characteristics as the set of individuals who are eligible to vote? In other words, does the set of voters "look" like the set of eligible voters? If voters are demographically similar to the electorate (i.e., eligible individuals) then we can conclude that in this basic sense, voters are descriptively representative. In chapter 3 we will turn to models that give the conditional relationship between these demographic characteristics and the likelihood of voting over time—that is, we will examine whether voters are representative of the electorate for each demographic characteristic, while conditioning on, or controlling for, other demographic characteristics.

Figures 2.1 through 2.7 graph report turnout rates by education (bottom third, middle third, and top third of the distribution), income (low to high quintiles), race/ethnicity (white, black, Latino, other; as well as white non-Hispanic, black non-Hispanic, white Hispanic, and other), age (18–24, 25–30, 31–45, 46–60, 61–75, and 76–84), gender, and marital status (married vs. nonmarried). In each of these figures the horizontal axis represents each presidential election year, while the vertical axis represents the percentage of individuals in each demographic group who report having voted. Changes over time in the turnout levels of each group can then be assessed by examining the movement (i.e., ups and downs) of each line, while differences in turnout rates across the demographic subgroups can be assessed by the distance between lines. The larger the distance between each line, the greater the turnout differences are based on the demographic characteristic of interest.

Figure 2.1 graphs turnout by thirds of the education distribution, and figure 2.2 graphs turnout by income quintile. The graphs for turnout by education and income levels are similar in that there are distinct differences across each demographic category, and these differences are observed for every election year between 1972 and 2008. In each election, individuals with higher levels of education are more likely to vote than individuals with lower levels of education, and individuals with higher levels of income are more likely to vote than those with lower levels of income.

In addition, while the differences in turnout across education and income levels (i.e., the distance between the lines) appear to be similar over time, the actual turnout rates vary across the period. Between 1972 and 1988, for example, turnout seems to be relatively stable, with a

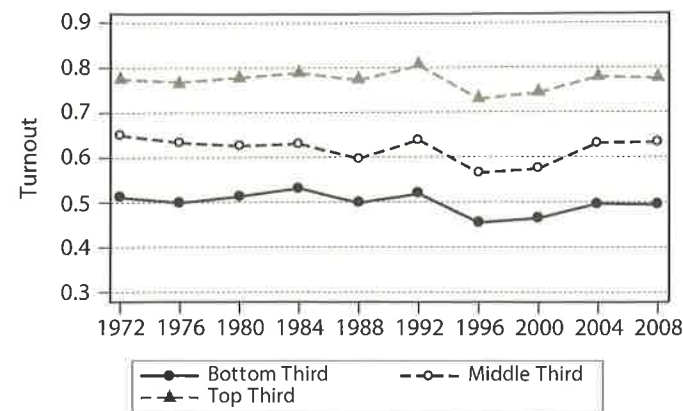


Figure 2.1. Turnout by Education, 1972–2008.

Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

notable increase (across all subgroups) in 1992, followed by a drop in turnout (again, across all subgroups) in 1996, and then increases in most subgroups in each election from 2000 to 2008. Regardless of these changes, the difference in turnout between the highest and lowest education group is about the same in 2008 as it was in 1972 (13.8 percentage points). For income, however, it appears that the difference in turnout between the highest and lowest income groups is slightly smaller in 2008 than it was in 1972 (25.3 percentage points in 2008 vs. 28.8 percentage points in 1972), with the lowest two income groups voting at increasing rates in each election after 1996.

These patterns confirm the enduring significance of education and income for patterns of voter turnout, and suggest that income bias of the voting population has been remarkably stable over time. Note that there are two important observations here: first, that the income bias of voters is large, and has been large in every election since 1972; and, second, changes in income bias over time have been rather small. In addition, that turnout of each group moves together suggests that the turnout of each group responds similarly to election specific factors. We return to this point in chapter 5. More broadly, we note that what we do *not* see is an increase in income bias in turnout that is anything like the increase in income inequality over this period. Thus, if the increasing income inequality over the period we examine has affected politics, it has done so through mechanisms other than through causing any substantial change in the representativeness of the voters.²⁵

25. See Bartels (2008) for a similar observation.

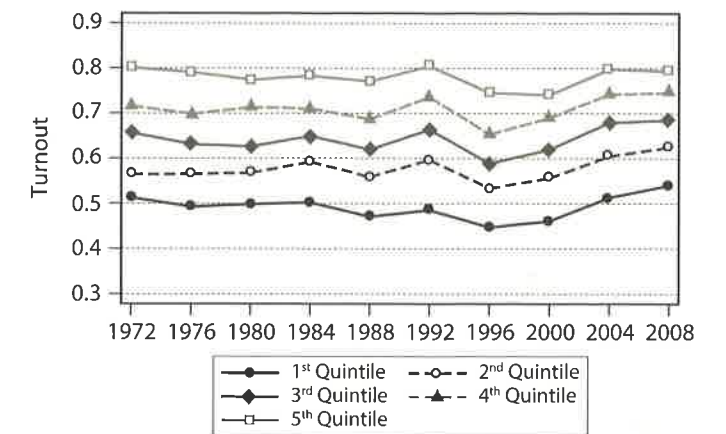


Figure 2.2. Turnout by Income, 1972–2008.

Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

In contrast to the relative stability in patterns of turnout by education and income we saw previously, we see substantial differences in relative turnout by race, ethnicity, age, and gender over time. We provide two separate graphs of turnout by ethnicity to show different combinations of ethnicity with race, and because of constraints in the available data. Figure 2.3 graphs turnout by race and ethnicity separately from 1972 to 2008; the categories for white, black, and other *include* Hispanics, and we include turnout of Hispanics as a separate measure in figure 2.3.²⁶ Figure 2.4 graphs turnout by ethnicity from 1976 to 2008, classifying respondents into four categories: white non-Hispanic, black non-Hispanic, other non-Hispanic, and white Hispanic.²⁷

Examining white non-Hispanic turnout over time as we do in Figure 2.4 is especially important because the makeup of those classified as white in 2008 is much different from the makeup of those classified as white in 1972. In 1972, most of the U.S. population could be characterized adequately as black or white, but by 2008 the homogeneity of the white racial category became questionable, as white Hispanics,

26. Note that in this graph respondents can appear in multiple categories: the Hispanic category includes white Hispanics, and the white category includes white Hispanics.

27. There are so few nonwhite Hispanics in the sample that we omitted them here and only analyze white Hispanics. However, as this constitutes almost all Hispanics in the United States, our inferences about turnout of white Hispanics could be used to describe Hispanics generally without offering the caveat that they are white Hispanics.

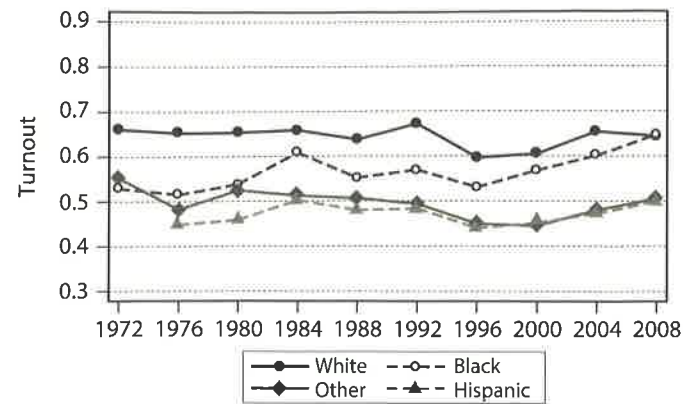


Figure 2.3. Turnout by Race, 1972–2008.

Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

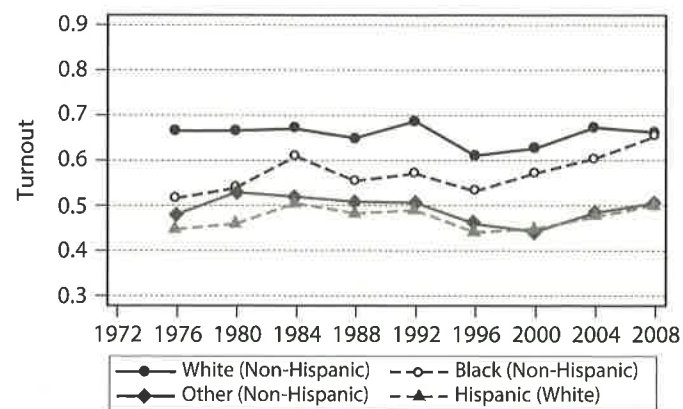


Figure 2.4. Turnout by Ethnicity, 1976–2008.

Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

a much larger group than in 1972, were now politically distinctive from white non-Hispanics. Thus, the black versus white categorization is not adequate for examining racial/ethnic group differences over this time period. Obviously the set of whites in 2008 included a much higher percentage of Hispanics than did the set of whites in 1972, and as Hispanic whites vote at a much lower rate than non-Hispanic whites, we

would be failing to measure what is a politically relevant demographic characteristic in combining the groups.

Figure 2.3 illustrates the dramatic change over time in turnout of these groups. Turnout of blacks increases from 53 percent in 1972 to 65 percent in 2008. Thus, where thirty years ago black turnout lagged substantially behind white turnout, in 2008 it was the same as white turnout. Note that black turnout first increased between 1976 and 1980, spiked substantially in 1984, declined through 1996, and then increased again. The high levels of turnout in 1984 and 2008 are consistent with claims of the importance of Jesse Jackson's presidential candidacy in 1984 and Barack Obama's candidacy in 2008 (see Tate [1991, 1993]; and Philpot [2009]). But it is also important to note that the trend toward increasing turnout of blacks relative to whites is observable outside of these elections. We note that this is a direct comparison of turnout rates *without* conditioning on income and education, where we would expect the lower levels of income and education of blacks to lead to lower turnout rates for blacks than whites.

This increase in black turnout has potentially important electoral consequences. Black turnout in 1972 was only 52.9 percent; in 2008 it was 64.7 percent. According to exit polls, Obama won 95 percent of the black vote in 2008. If black turnout in 2008 had been only what it was in 1972, Obama's overall vote share would have dropped by 1.2 percentage points. And, of course, given the geographic distribution of blacks, this would have meant more than 1.2 percentage points in some states and fewer in others. The point, of course, is that in a close state, 1.2 percentage points could easily be pivotal. Obviously the large impact here is because of the overwhelming support blacks give to Democratic candidates. Whereas Obama's share of the black vote was 52 percentage points higher than his share of the white vote, his share of the women's vote was only 7 percentage points higher than his share of the men's vote.

We also see changes in the turnout of Hispanics and Anglos over this time period. Figure 2.4 gives the turnout for white non-Hispanics, other non-Hispanics (Anglos), white Hispanics, and black non-Hispanics.²⁸ Anglo turnout follows the same pattern as that reported for the education and income groups: it is relatively stable until 1988, with a notable spike in 1992, followed by a drop in 1996 and then increases in 2000 and 2004. White Hispanic turnout, on the other hand, increases between 1976 and 1984, and then again from 1996 to 2008, after declining or remaining constant in 1988 and 1992. The key point here is that whereas black turnout increased considerably from 1972 to 2008, Hispanic turnout has increased much less. The 21.7 percentage-point gap in

28. Because of data availability, this graph starts in 1976 rather than 1972.

turnout between Anglos and white Hispanics that existed in 1976 shrank to a 16.1 percentage-point gap in 2008, with much of this shrinkage happening from 1976 to 1984. In 1984 and 1988 the gap was 16.5 percent and 16.6 percent, respectively. It did not drop below this level again until 2008, when it returned to 16.1 percent. Given the greater organization of Hispanic political groups compared to 1972, as well as the increasing size of the Hispanic community, the size of the gap in 2008 is striking.²⁹

Figure 2.5 shows patterns of turnout across age groups between 1972 and 2008 and also documents changes in the demographics of turnout. The most striking change here is in the dramatic increase in voter turnout in the oldest age group (76- to 84-year-olds). In 1972, less than 60 percent of this age group reported voting, but by 2008 that proportion had increased to nearly 75 percent. This increase resulted in the turnout of this oldest group exceeding turnout of 31- to 45-year-olds and 46- to 60-year-olds, at the same time that it approaches the turnout levels of 61- to 75-year-olds (the group with the highest levels of self-reported turnout.) As was the case in 1972, the youngest age group (18- to 24-year-olds) reports the lowest level of voting in every election year (with a notable spike in 2004 and a slight increase in 2008).

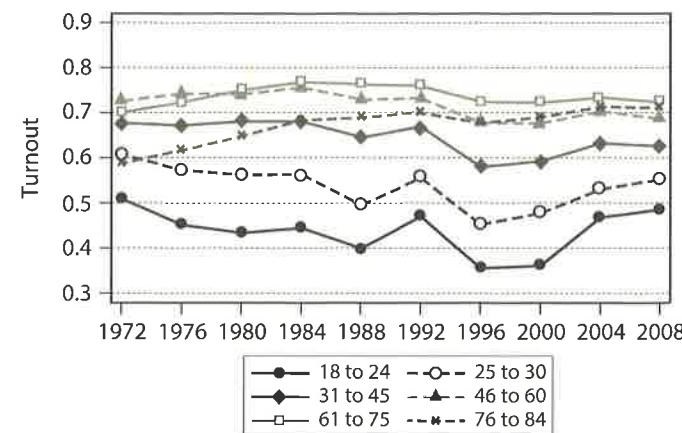


Figure 2.5. Turnout by Age, 1972-2008.
 Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

29. To be clear: we are talking about the gap in turnout of citizens!

We note that this increase in turnout is especially important because it coincides with demographic changes in the age distribution of the population. While 76- to 84-year-olds made up 4 percent of the citizen voting age population in 1972, they made up 5.4 percent of the citizen voting age population in 2008 (see table 2.2 for details on population proportions for other demographic groups in 1972 and 2008). Combining these changes with their increased turnout rate, their share of the voters increased from 3.6 percent in 1972 to 6.0 percent in 2008.

These results likely reflect that older Americans are healthier and wealthier today than they were in 1972, and are likely to be more active. But they are also consistent with what many observers of real politics have argued: that older Americans have become more politicized.

Changes in turnout patterns of men and women also emerge when we examine self-reported turnout from 1972 to 2008 (fig. 2.6). In 1972, women were less likely to report voting than were men, though since 1984 women have been consistently more likely to report voting than men. And the trend has been quite steady. By 2008 the gap in turnout between men and women had grown to over 4 percentage points. Some scholars have attributed increased participation by women to an increasing number of female candidates and national political figures (Atkeson 2003). Women have also entered the labor force in larger numbers over this period.

We note that this change is potentially important to election outcomes. Women vote Democratic at significantly higher rates than do men. Thus, this change in turnout rates in effect makes the set of voters more

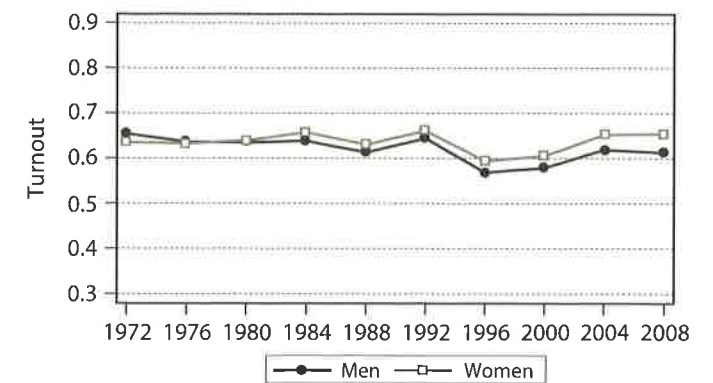


Figure 2.6. Turnout by Gender, 1972-2008.
 Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

Democratic than they would otherwise be. For example, in 2008, Barack Obama received 56 percent of women's votes and only 49 percent of men's votes. Had women and men voted at the same rate in 2008 that they did in 1972, Obama's overall vote share would have been 0.16 percentage points lower.

The final demographic characteristic we examine is that of marital status. As shown in figure 2.7, turnout of both married and single individuals has varied somewhat over time, but these changes are similar for the two groups: the turnout of single individuals increases in the same elections where the turnout of married individuals increases, and similarly for decreases in turnout. The turnout levels of both groups are fairly similar in 2008 to what they were in 1972, despite a fair amount of variation in the later elections. And single individuals continue to vote at levels substantially below the levels of married individuals.

More generally, then, what we see in these bivariate relationships over time is the enduring importance of education and income, compared to the more fluid relationship between turnout and race, ethnicity, age, or gender. Determining whether earlier findings that education is more important than income as a determinant of voter turnout are still correct requires a multivariable analysis of the type we conduct in chapter 3. Perhaps over this period of increasing economic inequality, both education and income remain important, but income has become more important than education. We will return to this question in chapter 3.

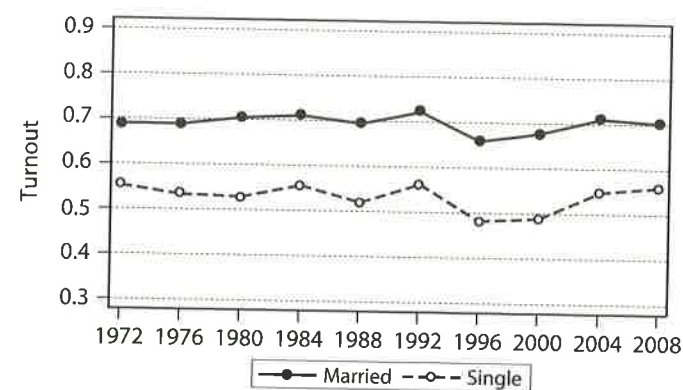


Figure 2.7. Turnout by Marital Status, 1972-2008.

Note: Entries are the self-reported turnout rate of the citizen voting-age population for each demographic group. Computed by the authors using data from the Current Population Survey.

2.5 A More or Less Representative Voting Population?

As Wolfinger and Rosenstone noted, "In short, voters are not a microcosm of the entire body of citizens but a distorted sample that exaggerates the size of some groups and minimizes that of others" (1980, 108). Based on the differential turnout rates documented in figures 2.1 through 2.7, it would seem that 2008's voting population was indeed, on most dimensions, as distorted as was the 1972 voting population.

While looking at the level of turnout of each group over time is useful for seeing what has been happening, normatively we are concerned with representativeness. The obvious question is, does a group's share of *the votes* match its share of *the population*? To provide a more systematic portrait of changes in electoral representativeness over time, we compare the representativeness of the 1972 and 2008 voting populations using a representativeness ratio similar to that used by Wolfinger and Rosenstone (1980, table 6.1) and Rosenstone and Hansen (2003, table 8.2). This ratio for each demographic group is computed by dividing the group's proportion of voters by its proportion of the voting-age citizen population. If the group is equally represented when comparing their proportion of voters to their proportion of the voting-age citizen population, then the representativeness ratio equals one; if the group is overrepresented as voters compared to the voting-age citizen population, then the ratio is greater than one; and if the group is underrepresented as voters compared to the voting-age citizen population, then the ratio is less than one.

Table 2.2 illustrates the calculations of representativeness for 1972 and 2008. To both make it comparable to Wolfinger and Rosenstone's original table and to illustrate the issues in comparing groups across time, we show representativeness for two measures of education. The first measure is simply level of education. Here we have four categories: less than high school graduate; high school graduate; some college; and college graduate and beyond. The second measure is placed in the education distribution, and here we have whether the respondent is in the bottom, middle, or top third of the education distribution. The table thus shows that the representativeness of the voting population with respect to *level* of education has changed drastically. In 1972, persons with less than a high school education had a representativeness ratio of 0.79, but by 2008 it had dropped to 0.62. However, if we simply look at persons in the bottom third of the education distribution, the representativeness ratio did not change. It was 0.79 in 1972, and 0.78 in 2008. Of course, the other thing that changed was the distribution of education in the population. Whereas 36.6 percent of the citizen voting age population in 1972 had less than a high school degree, in 2008 the corresponding number was only 11.2 percent.

Table 2.2. Representativeness of Voters by Demographic Groups, 1972 and 2008.

	1972			2008		
	% of CVAP ^a	% of Voters ^b	Ratio: Voters/CVAP ^c	% of CVAP ^a	% of Voters ^b	Ratio: Voters/CVAP ^c
Less than High School	36.6	29.0	0.79	11.2	6.9	0.62
High School Grad	37.5	38.7	1.03	31.7	27.4	0.86
Some College	14.3	16.8	1.18	29.6	31.6	1.07
College Grad and Above	11.7	15.5	1.33	27.5	34.1	1.24
Education—Bottom Third	32.8	25.9	0.79	31.9	24.7	0.78
Education—Middle Third	33.6	33.8	1.01	34.6	34.5	0.99
Education—Top Third	33.6	40.3	1.20	33.5	40.8	1.22
Income—1st Quintile	20.1	15.9	0.79	19.5	15.5	0.79
Income—2nd Quintile	20.0	17.3	0.87	19.6	18.0	0.92
Income—3rd Quintile	19.8	20.0	1.01	19.8	19.9	1.00
Income—4th Quintile	20.1	22.1	1.10	20.4	22.4	1.10
Income—5th Quintile	20.0	24.7	1.23	20.8	24.3	1.17
Age 18–24	18.3	14.3	0.78	12.8	9.3	0.76
Age 25–30	12.9	12.0	0.93	10.6	9.2	0.87
Age 31–45	24.9	26.6	1.04	26.4	26.0	0.98
Age 46–60	24.6	27.5	1.12	28.7	30.8	1.08
Age 61–75	15.4	16.6	1.08	16.2	18.3	1.13
Age 76–84	4.0	3.6	0.91	5.4	6.0	1.11
Women	53.0	52.3	0.99	52.1	53.7	1.03
Single	30.9	26.4	0.85	46.0	40.5	0.88
Black	10.0	8.2	0.82	12.1	12.3	1.02
Hispanic	—	—	—	9.5	7.4	0.78

^a Entries in the first and fourth columns are the percentages of citizens in the voting-age population in the referenced demographic group, for 1972 and 2008, respectively. Computed by the authors using data from the 1972 and 2008 Current Population Surveys.

^b Entries in the second and fifth columns are the percentages of voters in the referenced demographic group, for 1972 and 2008, respectively. Computed by the authors using data from the 1972 and 2008 Current Population Surveys.

^c Entries in the third and sixth columns are the ratios of the demographic group's share of voters to the demographic group's share of the citizen voting-age population, for 1972 and 2008, respectively. Values less than 1 indicate underrepresentation of the specific demographic group among voters, while values greater than 1 indicate overrepresentation of the specific demographic group among voters. Computed by the authors using data from the 1972 and 2008 Current Population Surveys.

The 2008 voting population is more representative of blacks than was the 1972 voting population, with the representation ratio increasing from 0.82 to 1.02. We also see changes in representativeness across age groups. In 1972 persons between the ages of seventy-six and eighty-four were underrepresented among voters (ratio of 0.91), but, in 2008 this group was *over*represented among voters (ratio of 1.11). In contrast to these notable changes, the representativeness ratio for women increased only slightly, from 0.99 to 1.03. For singles, their representativeness ratio barely changed (0.85 to 0.88).

In addition to representativeness, table 2.2 shows the share of votes held by different groups. Comparing the percent of voters column in 1972 with the percent of voters column in 2008 highlights several politically meaningful changes. Whereas in 1972 76- to 84-year olds had 3.6 percent of the votes, in 2008 they had 6.0 percent of the votes. Single people had 26.4 percent of the votes in 1972, but 40.5 percent of the votes in 2008. And blacks had 8.2 percent of the votes in 1972 and 12.3 percent of the votes in 2008. Given the differences in voting patterns of blacks versus nonblacks, and single people versus married people, these shifts in the share of votes have potentially important implications for election outcomes.³⁰

2.6 More or Less Income Bias?

Research on and discussions of income bias in turnout can focus on two very different questions, both of which are important. Being precise about which question is being addressed is critical to knowing the proper way to answer the question.

First, if we are asking whether lower-income people are less well represented among the voters than among the voting age population, then we do not need to condition on other characteristics of the lower-income population. Those other characteristics are irrelevant to the question. We simply need to compare the fraction of the votes cast by lower-income people to their fraction of the eligible voting population. This is what we do in table 2.2.

But, second, if instead we are asking whether a lower-income person is less likely to vote than a similar higher-income person—that is, one who shares the lower-income person's other demographic characteristics (e.g., the same age, education, ethnicity, and gender)—then we would

30. See Teixeira (2010) for a fuller analysis of the electoral implications of demographic change.

need to proceed differently. To answer this question we would, of course, need to condition on other characteristics potentially associated with income and turnout. If we observe that, on average, lower-income people vote less than higher-income people, we might want to know if this difference in voting rates can be explained by other observable demographic characteristics of the respondents. In the case of income, we might want to know this based on concerns of representation and fairness. We know that income generally increases as people get older, but we would not want to infer that poor people vote less simply because younger people vote less.

Answering this second type of question also allows us to do two things. First, it indicates what needs to be explained beyond what is in our model. If Hispanics vote less than Anglos on average, but vote at the same rate as Anglos once we condition on education, income, and age, then we would not need to look for other causal explanations of why Hispanic turnout is low relative to Anglo turnout. We would have found that Hispanic turnout is lower than Anglo turnout because Hispanics are less educated, have less income, and are younger. But, if Hispanics vote less than Anglos even *after* conditioning on other demographic characteristics, then we would need to look for other explanations to explain why that is so.

Answering this second question also provides useful information if we are interested in the marginal *effect* of different attributes on turnout, and are trying to draw causal inferences from observed conditional relationships between individual characteristics and turnout. We note that drawing causal inference about the relationship between observable characteristics and turnout in cross-sectional data is problematic. But we are still interested in these conditional relationships.

Our earlier work on income bias has addressed both of these questions and suggested that income bias had not increased between 1972 and 1988. Our earlier analysis (Leighley & Nagler 1992b) focused primarily on two different tests of changes in income bias. First, we examined changes in the turnout of different income quintiles over time. Increasing differences between the turnout of members of the top and bottom income quintiles over time would be evidence of increasing income bias, as would differences between the turnout rates of each income quintile and overall turnout. We found these differences to be surprisingly small from 1972 to 1988.

Second, we tested for changes in the conditional relationship between income and turnout, controlling for other demographic characteristics associated with voter turnout (i.e., race, gender, age, marital status, living in the South), to assess whether income as an explanatory variable became stronger over time. Should income bias in turnout be

increasing, then the conditional relationship between income and turnout should increase, or the relationship between other characteristics associated with turnout and income would have to change. Using a probit model of voter turnout, we found that the conditional relationships between turnout and both income and education were relatively stable between 1972 and 1988. These two sets of evidence led to our conclusion that there was little (almost no) change in income bias between 1972 and 1988.³¹

The data we report in table 2.2 suggests that income bias is similar in 1972 and 2008 and thus that it has not changed dramatically since 1988. Specifically, the representativeness ratio for the poorest income group is the same in 2008 as it was in 1972, the ratio for the second poorest quintile increases by .05, and the ratio for the middle quintile changes only from 1.01 to 1.00. The fourth quintile stays the same at 1.1, while the wealthiest quintile's score decreases from 1.23 to 1.17. This decrease in overrepresentation is the largest change among all the income groups.

These findings contradict Freeman's (2004) and Darmofal's (2005) conclusions that income bias has increased. We believe that some of the disagreement in the literature on whether income bias has increased or not (in the form of inconsistent or inconclusive evidence) reflects the particular way in which income bias is measured, the particular statistical approach used to examine income bias, and the particular time periods chosen for study.

For example, we note that one must be cautious in drawing conclusions regarding income bias when examining only the top and bottom income groups. The simplicity of comparing the extremes of income distribution likely overlooks the economic diversity of American society, as well as the possibility that notably different patterns of income gains and losses across income groups may have vastly different political consequences. One might imagine, for instance, a relatively stable rate of income bias over time when comparing the turnout of the wealthiest quintile to the poorest—but quite different political implications would likely result if at the same time middle-income voters are either energized or demobilized by economic and political circumstances.

We also argue that it is all the more important to examine income bias over a series of elections. Early studies noting the income bias of the voting population assumed that as turnout (supposedly) declined in the 1970s it was lower-status individuals withdrawing more quickly

31. Using similar measures, Shields & Goidel (1997) both expand on and confirm these conclusions in the case of midterm elections between 1958 and 1994.

than higher-status individuals—though the decline was implicitly viewed as a process occurring over the course of several elections (see, e.g., Burnham [1980, 1987, 1988]; and Reiter [1979]). Assessing income bias across a long series of elections allows us to determine to what extent income bias in the voting population is malleable from election to election, or instead moves in the form of small changes tending in the same direction.

Analyses of changes in income bias over time are fundamentally constrained by the time period considered, as well as assumptions regarding the linearity of changes over time, either in theory or practice. That is, if we seek to test for an increase between two points in time, then which two points are chosen may make a difference for our conclusions. The data presented in table 2.2, for example, may reflect these two particular election years: one in which George McGovern is running as a liberal Democrat and one in which John McCain is running for election in a time of war as a conservative Republican, the latter with a marked increase in aggregate voter turnout. This evidence cannot tell us whether the substantive finding that there is decreasing representation of any one group would differ if instead we compared 1980 to 2008, or 2000 to 2008.

From a practical perspective, this means that when evaluating income bias over time one must consider whether year-to-year changes are as notable as an underlying trend over time. The possibility of election-specific changes in income bias independent of overall turnout is intriguing, as we know that candidates, issues, and party strategies often differ substantially across elections, and that some elections take place in periods of increasing economic inequality while others do not. Hence, changes in income bias might be observed only in particular periods within the broader time frame of the analysis. If year-to-year changes dominate the trend, then it suggests that income bias responds to specific political interests and is thus potentially malleable by elites.

Our analysis of income bias from 1972 to 2008 focuses primarily on differences in turnout across income groups, but we also present differences in turnout across education groups since these data are often presented in analyses of socioeconomic bias more broadly defined. Figures 2.8 and 2.9 plot the representativeness scores for income and education groups for each election from 1972 through 2008.³²

Again, we see that the representativeness of the voting population with respect to the electorate has basically remained stable since 1972 for both income and education. The middle-income group is fairly represented,

32. The representativeness scores for income and education, as well as representativeness scores and similar representativeness graphs for race, ethnicity, age, gender, and marital status, are included in appendix 2.2.

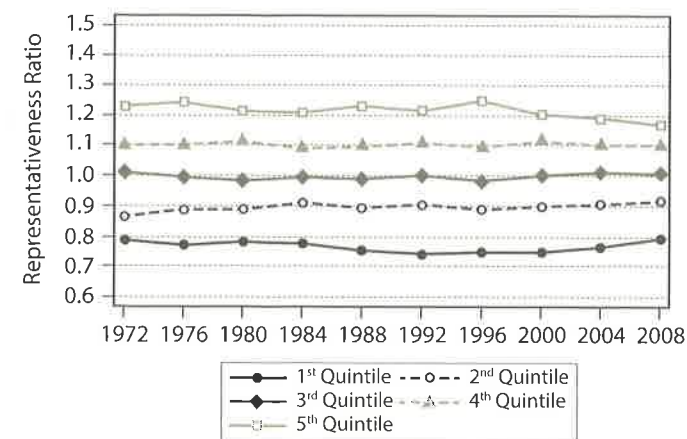


Figure 2.8. Representativeness of Voters Compared to Citizens, by Income, 1972–2008.

Note: Entries are the ratio of the income group's share of voters (based on self-reported vote) to the income group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific income group among voters, while values greater than 1 indicate overrepresentation of the specific income group among voters. Computed by the authors using data from the Current Population Survey.

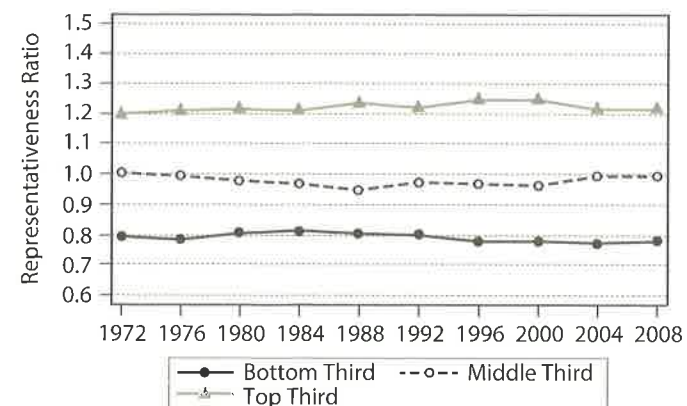


Figure 2.9. Representativeness of Voters Compared to Citizens, by Education, 1972–2008.

Note: Entries are the ratio of the education group's share of voters (based on self-reported vote) to the education group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific education group among voters, while values greater than 1 indicate overrepresentation of the specific education group among voters. Computed by the authors using data from the Current Population Survey.

with the group's representativeness score very close to 1 for the entire period, while the highest two income groups are overrepresented. While there are slight variations from election to election, the level of representation for these three groups seems to be fairly stable. The lowest two income groups, in contrast, are underrepresented, with representativeness scores generally between 0.7 and 0.9. Though changes are still quite small, it appears that the second income group's representativeness score increases over time, while the lowest income group's representativeness score dipped slightly in the 1980s, but rebounded from 2000 to 2008. The relatively flat lines associated with these representativeness scores indeed suggest that income bias in the voting population, as measured by income, has remained relatively stable over time. We emphasize here that we are not interested in arguing about whether the representativeness of the bottom income quintile has gone from 0.79 to 0.81. Our point is that it is very stable, and that changes in the distribution of income dwarf changes in the distribution of votes.

To put this in perspective we can compare changes in the share of *income* held by the bottom income quintile to changes in the share of the *votes* held by the bottom income quintile. This quintile had their highest share of income (5.5 percent of total income) in 1972, and their lowest share of income (4.0 percent of total income) in 2008. This is a drop in 27 percent of the group's share of income.³³ In contrast, the highest recorded share of votes held by the bottom quintile during the period we examine was 15.9 percent of the total votes (in 1972). The group's lowest share of the votes held was in 1992, when the bottom quintile had 14.0 percent of the total votes. This means that the largest drop in *vote share* for the bottom quintile over this period was 12 percent. Thus comparing the loss in income share to the (temporary) loss in vote share over this period, we see that the loss in income share is almost two and a half times the loss in vote share. And by 2008 the share of votes held by the bottom quintile had rebounded to 15.5 percent, and was thus 2.5 percent below the share held in 1972.

We see similar results for education. Not surprisingly, given the importance of education as a predictor of voter turnout, the two highest education thirds have representativeness scores close to or greater than 1 throughout the entire period, while the lowest education group is underrepresented for the entire period. But there is no substantial shift in the magnitude of under-representation for the lowest group, though we see some election to election variation.

33. Note that we are using percent of the original quantity here, not percentage points. Thus, the 27 percent drop in income share for the bottom income quintile is calculated based on the 1.5 *percentage-point* drop from 5.5 to 4.0 as $(100 * [1.5/5.5])$.

2.7 Representation: Of the Eligible or the Available?

Normatively we believe that in a fair world, poor people and rich people should have proportionately equal shares of the votes; each citizen's right to a ballot should carry equal weight, even though her wealth may be decidedly unequal. For example, the people in the bottom fifth of the income distribution should have 20 percent of the votes, and the people in the top fifth of the income distribution should have 20 percent of the votes.

One group's proportion of the population may differ from its proportion of the votes for two very different reasons. First, legally eligible members of income (or other relevant) groups may differ in their average likelihood of voting, and those groups such as the poor (whose members are less likely to vote than the rich) will be underrepresented among the voters—that is, represent a smaller proportion of votes than their presence in the population. Second, some groups may contain a larger proportion of people legally ineligible to vote than other groups. For instance, more among the poor than the rich may be legally ineligible to vote because of prior felony convictions, or more of the poor than the rich may be noncitizens. Most studies and discussions of income bias focus on the first explanation in that ample evidence documents that the legally eligible poor are less likely to vote than the legally eligible wealthy.

However, legal issues of voting eligibility also affect the representativeness of the poor relative to the rich. Although poll taxes and such devices have been effectively eliminated, states nonetheless maintain the ability to determine who is eligible to vote.³⁴ The key requirement common to state electoral requirements is citizenship. While this does not explicitly disenfranchise the poor, noncitizens residing in the United States are more likely than citizens to be poor.³⁵ And because the poor are more likely than the wealthy to be ineligible to vote, they are then less likely to be represented among the voters.

One might argue that analyses of income bias that are restricted to the *eligible* population misconceptualize the population that merits representation if elections are to truly reflect the interests of all those governed by elected officials. An important alternative approach to assessing income bias in the voting population is to compare the relative proportion of the poor in the *resident* population, rather than in the *eligible* population, to their proportion among the voters. Changes in income bias can then be measured using this different conceptualization

34. For example, many states restrict felons from voting.

35. In 2008, median household income of citizens was approximately \$51,000, compared to less than \$38,000 for noncitizens (DeNavas-Walt, Proctor, & Smith 2009).

and provide an alternative assessment of the representation of the poor and the wealthy in U.S. politics today. As the proportion of ineligible voters has increased substantially over this period due to an increase in noncitizens among the population, we could see changes in this measure of income bias even if the behavior of *eligible voters* has remained unchanged over time.

Figures 2.10 and 2.11 present this alternative measure of representativeness, where all voting-age individuals, rather than just voting-age citizens, are included in the denominator of the representativeness ratio. For both education and income we see that the representation of the people at the bottom of the socioeconomic scale suffers compared to the measures based on citizens only (presented in figures 2.1 and 2.2). In 2008, the representativeness ratio for *citizens* in the bottom income quintile was 0.79, compared to 0.75 for the voting-age population.³⁶ And in 2008 the representativeness ratio for *citizens* at the bottom of the education scale was 0.78, while the representativeness ratio for all

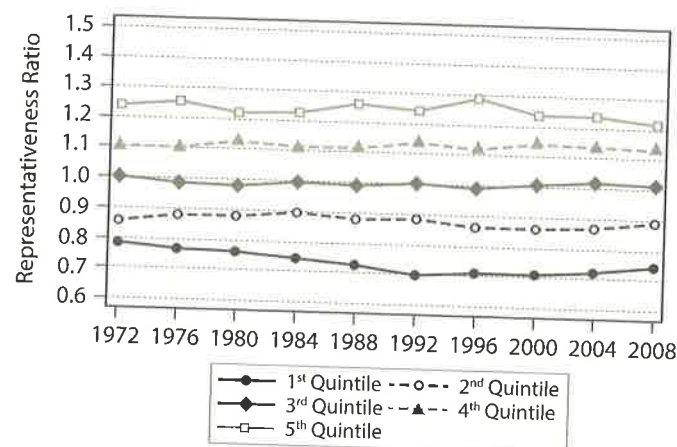


Figure 2.10. Representativeness of Voters Compared to the Voting-Age Population, by Income, 1972–2008.

Note: Entries are the ratio of the income group's share of voters (based on self-reported vote) to the income group's share of the voting-age population. Values less than 1 indicate underrepresentation of the specific income group among voters, while values greater than 1 indicate overrepresentation of the specific income group among voters. Computed by the authors using data from the Current Population Survey.

36. See McCarty, Poole, & Rosenthal (2008) for more on the relationship between citizen and noncitizen income.

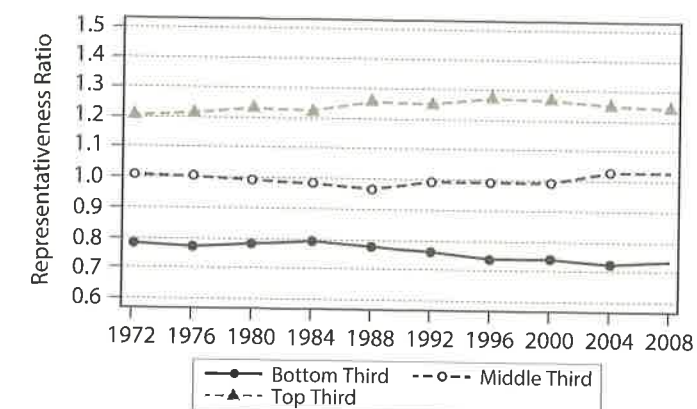


Figure 2.11. Representativeness of Voters Compared to the Voting-Age Population, by Education, 1972–2008.

Note: Entries are the ratio of the education group's share of voters (based on self-reported vote) to the education group's share of the voting-age population. Values less than 1 indicate underrepresentation of the specific education group among voters, while values greater than 1 indicate overrepresentation of the specific education group among voters. Computed by the authors using data from the Current Population Survey.

persons was only 0.74. Thus, our answer to the question of whether income bias of voters *relative to the voting-age population* has increased is different from our answer to the question of whether income bias *relative to the set of eligible voters* has increased. Income bias relative to the voting-age population *has indeed increased*.

2.8 Conclusion

The evidence we have presented in this chapter is based on the most comprehensive and systematic data available on voter turnout in the United States between 1972 and 2008. We have reported several important facts about voter turnout since 1972. First, voter turnout in presidential elections since 1972 has not declined systematically. Instead, it has been slightly higher in some elections, and slightly lower in other elections. Overall turnout levels seem to reflect as much about the political context of each election as they do about citizens' underlying motivation or willingness to participate in the electoral process.

Second, the relationships among income, education, and voter turnout are quite strong: the probability of a highly educated or wealthy

individual casting a ballot is much, much higher than the probability of a less-educated or poorer individual casting a ballot. As a result, the income bias of U.S. presidential voters is large, even huge. Third, these differences in turnout have been remarkably stable over this thirty-six-year period. During a period marked by truly massive changes in economic inequality, we do *not* find a significant increase in income bias in turnout of the electorate. There may have been a small increase, but nothing substantial, and certainly nothing to suggest a large relationship between changes in economic inequality and turnout. When we move beyond the electorate to consider the voting-age population (including noncitizens), however, there has been an increase in income bias since 1972.

Fourth, there is less stability in turnout patterns by age, gender, and ethnicity since 1972 compared to those of education and income. There has been a small shift in the relative turnout of women and men. Women are now more likely to vote than men, and the gap has been widening. Because women comprise a group that makes up more than 50 percent of the electorate, and behave substantially differently from men in their vote choices, this is potentially quite an important political shift. There has been a substantial change in black turnout relative to white turnout since 1972. However, the increase in Hispanic turnout has been much smaller, and turnout of Hispanic citizens still lags far behind turnout of non-Hispanic whites. Finally, we have documented a large increase in turnout of older voters relative to turnout of younger voters.

The centrality of demographics in models of voter turnout underscore their fundamental importance to the resources and strategies of both citizens and elites. These basic comparisons provide an initial baseline for the importance of demographics to voter turnout. In chapter 3 we discuss in greater detail the theoretical importance of each of these demographic characteristics and how they might relate to each other. We then test whether the stability of education and income as primary determinants of voter turnout hold when we condition on other demographic characteristics of interest.

Appendix 2.1: Current Population Survey: Sample and Variable Details

Data for the Census Bureau's Current Population Survey November Supplement was taken from data provided by Unicon, a private firm that sells individual-level census data repackaged so that it is easier to extract common variables across multiple years. It is simply a repackaging of the

data; coding decisions must still be made by the analyst (in this case, the authors). Thus we provide the Unicon variable name below.

Turnout: This is self-reported turnout. We treat blanks in the data set as missing data; we treat "dont know," "no response," and "refused" as not having voted. This coding lets us match what the Census Bureau reports as the turnout rate in their published summaries of CPS data. [Unicon Variable: *votecast*.]

Education: We use respondents' self-report of education to place them in either the bottom, middle, or top third of the education distribution for the year of the election. For people whose reported education category would straddle different thirds of the distribution, we use random assignment to place them. [Unicon Variable: For 1972–90, we use *grdhi* (highest grade completed). For 1992–2008, we use *grdatn* (highest grade attended), then combine this with *grdcom* (grade completed).]

Income: We place respondents in the appropriate income quintile based on reported total family income. [Unicon Variable: *faminc*.]

Age: Respondent's reported age. Recoded into six categories: 18–24, 25–30, 31–45, 46–60, 61–75, and 76–84. The variable is top-coded at 84 years. (Thus, we do not report on turnout of those over 84 years of age.) [Unicon Variable: *age*.]

Gender: self-reported. [Unicon Variable: *sex*.]

Marital Status: Self-report. Coded as 1 if married with spouse present; otherwise 0. [Unicon variable: *marstat*.]

Citizen: Coded as 1/0, self-reported. [Unicon Variable: *citus* (1978–92), *citstat* (1994–2008), *notreg* (1972–76)]

Three-category Race Variable: This variable is coded as black, white, or other. It is based on respondent self-report. For 1972–88 the census coding was white, black, other. In 1996–2002 the categories American Indian or Alaskan Native and Asian Pacific Islander were added. We coded both of these as "other." In 2004 and 2008, respondents could choose from many sets of multiple-race categories. As these codings constituted barely 2 percent of respondents, we also coded these multiple race categories as "other." [Unicon Variable: *race*.]

Hispanic: This is a self-report based on a question of origin or descent for 1976–2000. Responses of Mexican American, Chicano, Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish were coded as Hispanic. For 2004 and 2008, this is a respondent's self-report to being Spanish, Hispanic, or Latino. This variable is not available for 1972. [Unicon Variable: *spmeth*.]

Other Ethnicity Codes: Coding for white Hispanic, White non-Hispanic, black Non-Hispanic, and other were created by combining the three-category race variable and the Hispanic variable.

Appendix 2.2: Additional Data on the Representativeness of Voters, 1972–2008

Table A2.2.1. Representativeness Scores for Demographic Groups, Comparing Voters to Citizens, 1972–2008.

Group	1972	1976	1980	1984	1988	1992	1996	2000	2004	2008
Less than High School	0.79	0.78	0.77	0.76	0.73	0.69	0.67	0.65	0.62	0.62
High School Grad	1.03	0.99	0.98	0.96	0.94	0.92	0.89	0.88	0.88	0.86
Some College	1.18	1.14	1.12	1.11	1.10	1.09	1.08	1.06	1.08	1.07
College Grad and Above	1.33	1.35	1.33	1.31	1.33	1.29	1.32	1.30	1.25	1.24
Education—Bottom Third	0.79	0.78	0.80	0.81	0.80	0.80	0.78	0.78	0.77	0.78
Education—Middle Third	1.00	1.00	0.98	0.97	0.95	0.97	0.97	0.96	0.99	0.99
Education—Top Third	1.20	1.21	1.22	1.21	1.24	1.22	1.25	1.25	1.22	1.22
Income—1st Quintile	0.79	0.77	0.78	0.77	0.76	0.74	0.75	0.75	0.76	0.79
Income—2nd Quintile	0.87	0.89	0.89	0.91	0.90	0.91	0.89	0.90	0.91	0.92
Income—3rd Quintile	1.01	0.99	0.98	1.00	0.99	1.00	0.99	1.00	1.01	1.00
Income—4th Quintile	1.10	1.10	1.11	1.09	1.10	1.11	1.10	1.11	1.10	1.10
Income—5th Quintile	1.23	1.25	1.21	1.21	1.23	1.21	1.25	1.20	1.19	1.17
Age 18–24	0.78	0.71	0.68	0.68	0.64	0.72	0.61	0.61	0.73	0.76
Age 25–30	0.93	0.91	0.88	0.86	0.79	0.84	0.77	0.8	0.83	0.87
Age 31–45	1.04	1.06	1.06	1.04	1.03	1.02	0.99	0.99	0.99	0.98
Age 46–60	1.12	1.16	1.15	1.16	1.16	1.11	1.16	1.14	1.10	1.08
Age 61–75	1.08	1.12	1.17	1.18	1.22	1.16	1.24	1.21	1.15	1.13
Age 76–84	0.91	0.95	1.01	1.05	1.10	1.07	1.16	1.16	1.11	1.11
Women	0.99	1.00	1.00	1.01	1.01	1.01	1.02	1.02	1.02	1.03
Single	0.85	0.83	0.83	0.85	0.83	0.86	0.83	0.82	0.86	0.88
Black	0.82	0.81	0.84	0.93	0.88	0.87	0.91	0.95	0.94	1.02
Hispanic	x	0.69	0.72	0.77	0.77	0.76	0.75	0.75	0.74	0.78
White (Non-Hisp)	x	1.04	1.04	1.02	1.03	1.04	1.04	1.04	1.05	1.04

Note: Entries are the ratios of the group's share of voters (based on self-report) to the group's share of the citizen voting-age population. Values less than one indicate underrepresentation of the group among voters, while values greater than 1 indicate overrepresentation of the group among voters. Computed by authors using data from the Current Population Survey.

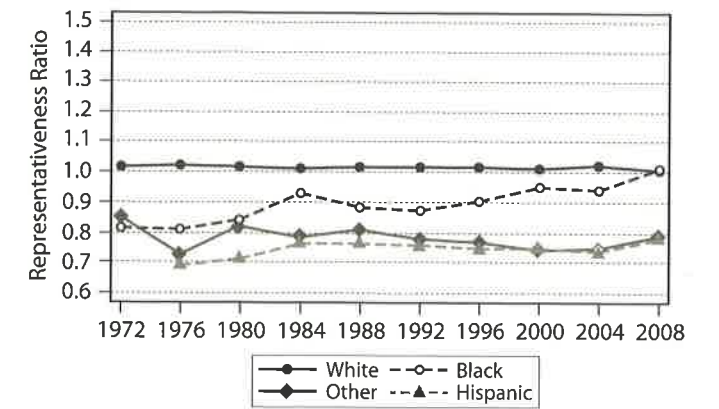


Figure A2.2.1. Representativeness of Voters Compared to Citizens, by Race, 1972–2008.

Note: Entries are the ratios of the racial group's share of voters (based on self-report) to the racial group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific racial group among voters, while values greater than 1 indicate overrepresentation of the specific racial group among voters. Computed by the authors using data from the Current Population Survey.

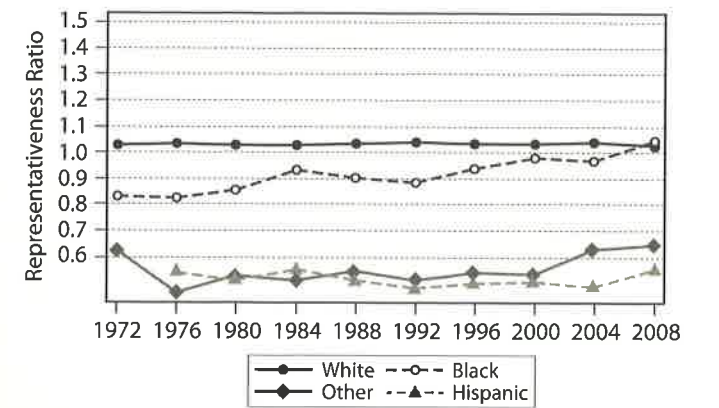


Figure A2.2.2. Representativeness of Voters Compared to the Voting-Age Population, by Race, 1972–2008.

Note: Entries are the ratios of the racial group's share of voters (based on self-report) to the racial group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific racial group among voters, while values greater than 1 indicate overrepresentation of the specific racial group among voters. Computed by the authors using data from the Current Population Survey.

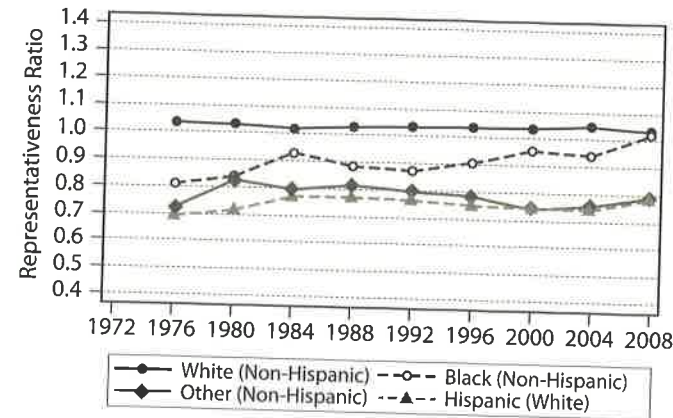


Figure A2.2.3. Representativeness of Voters Compared to Citizens, by Ethnicity, 1976–2008.

Note: Entries are the ratios of the ethnic group's share of voters (based on self-report) to the ethnic group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific ethnic group among voters, while values greater than 1 indicate overrepresentation of the specific ethnic group among voters. Computed by the authors using data from the Current Population Survey.

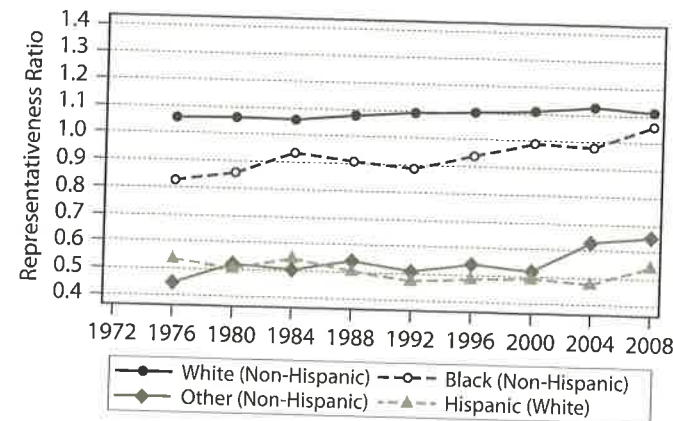


Figure A2.2.4. Representativeness of Voters Compared to the Voting-Age Population, by Ethnicity, 1976–2008.

Note: Entries are the ratios of the ethnic group's share of voters (based on self-report) to the ethnic group's share of the voting-age population. Values less than 1 indicate underrepresentation of the specific ethnic group among voters, while values greater than 1 indicate overrepresentation of the specific ethnic group among voters. Computed by the authors using data from the Current Population Survey.

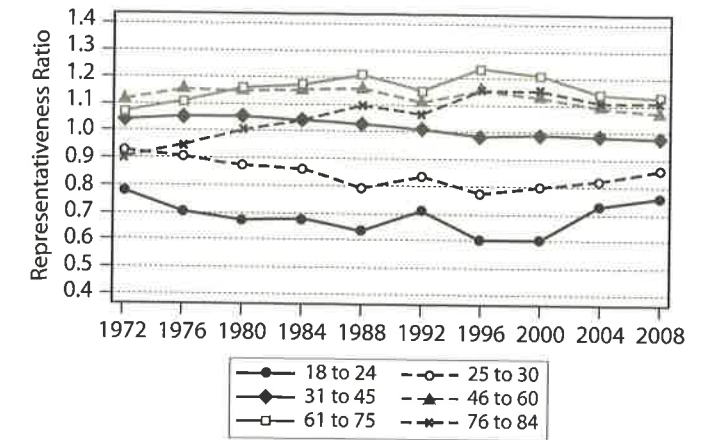


Figure A2.2.5. Representativeness of Voters Compared to Citizens, by Age, 1972–2008.

Note: Entries are the ratios of the age group's share of voters (based on self-report) to the age group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific age group among voters, while values greater than 1 indicate overrepresentation of the specific age group among voters. Computed by the authors using data from the Current Population Survey.

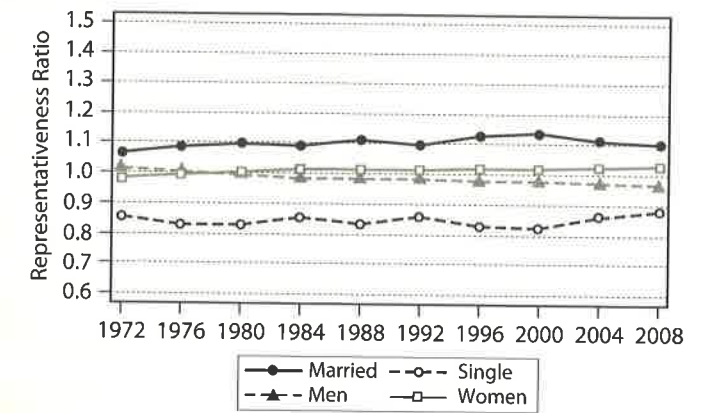


Figure A2.2.6. Representativeness of Voters Compared to Citizens, by Marital Status and by Gender, 1972–2008.

Note: Entries are the ratios of the marital status/gender group's share of voters (based on self-report) to the marital status/gender group's share of the citizen voting-age population. Values less than 1 indicate underrepresentation of the specific marital status/gender group among voters, while values greater than 1 indicate overrepresentation of the specific marital status/gender group among voters. Computed by the authors using data from the Current Population Survey.