

# *Direct Democracy and the Selection of Representative Institutions: Voter Support for Apportionment Initiatives, 1924–62*

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## ABSTRACT

If voters had the opportunity to choose the characteristics of their representative institutions directly, how would they do so? Voters in several states selected the base of their state legislative apportionment through the initiative process prior to the reapportionment revolution of the 1960s, which provides a unique opportunity to answer this question. This study examines 13 such initiatives in four states between 1924 and 1962. Four factors are hypothesized to influence vote choice on these initiatives: urban-rural conflict, partisanship, race, and economic self-interest. Through regression analysis of the county-level vote in these elections I find that economic self-interest consistently influences voter support for apportionment initiatives while these other factors influence it only occasionally. This finding suggests that distributive politics drive voters' evaluation of representative institutions and that the influence of other political factors depends on the historical and local context of an initiative.

PRIOR TO THE UNITED STATES Supreme Court's rulings in *Baker v. Carr* (1962), *Reynolds v. Sims* (1964) and the other related cases that established the principle of equal apportionment for political districts, one source of unequal representation was the people themselves.<sup>1</sup> In the early to mid-twentieth century, voters in several states approved initiatives that established bases of representation that caused state legislative districts to deviate significantly from population equality. For example, in 1926, California voters chose to limit each county to no more than one state senator. The effect was that in 1926, the smallest state senatorial district (Inyo and Mono counties), with a population of only about 8,000, elected the same number of senators as the most populous district (Los Angeles County), which had nearly two million people—a ratio of 250 to 1. By 1960, this dispar-

ity in representation had grown to a ratio of approximately 430 to 1.<sup>2</sup> On the other hand, some states' voters chose apportionment institutions that moved their legislative districts toward population equality. For example, in 1950, Oregon voters rejected a measure that would have guaranteed every county at least one state representative, regardless of population, and after lengthy periods of legislative inaction, voters approved initiatives in Washington state in 1930 and 1956, redistributing population more equally among legislative districts.<sup>3</sup>

What accounts for public support for initiatives that alter the equality of state legislative apportionment? These initiatives offer a unique opportunity to analyze citizens' preferences for basic political institutions, the rules of the game by which substantive and symbolic representation are achieved. Although the Supreme Court decisions of the 1960s now preclude states from choosing different bases of apportionment, voters are still often called upon to choose features of their political system, most notably term limits in many states in the 1990s, but also campaign finance reform, rules about primary elections, the establishment of redistricting commissions, and many others. More generally, the lessons learned from these historical apportionment initiatives remain relevant today as they contribute to our understanding of how people evaluate political institutions, a basic question of political theory.

Although scholars of state politics at the time of these early initiatives noted that the public often supported unequal districting systems (Dixon 1968; Key 1956), no study has attempted to explain that support using systematic empirical analysis.<sup>4</sup> In this article, I assess the relative importance of four possible determinants of these votes using county-level data on 13 apportionment initiatives voted on in four states between 1924 and 1962. Three of the hypothesized factors represent different broad political and social divisions: urban-rural location, partisanship, and race. The fourth factor is economic self-interest, defined in terms of the state allocation of government spending. I find that while each of these four factors has an effect on voting on at least one of the initiatives in my dataset, the most consistently influential factor is economic self-interest. Thus, I conclude that while the precise mix of influences in the vote on these initiatives is context specific, distributive concerns constitute the common denominator in the democratic choice of political institutions. Other dimensions are sometimes equally influential, but only economic self-interest is consistently so.

## PREFERENCES, INSTITUTIONS, APPORTIONMENT, AND POLICY CONSEQUENCES

The rational choice model of human behavior provides a basic framework for analyzing voting decisions based on simple assumptions about alternatives and preferences. For a ballot proposition, voters face two alternatives—to approve or disapprove of the measure.<sup>5</sup> According to the rational choice model, a voter will choose the alternative that he or she most prefers. If a measure concerns economic policy, this preference is generally assumed to be based on the consequences of the measure for the voter's economic self-interest (Gerber and Phillips 2003; Lupia 1994). But initiatives about political institutions, the rational choice logic requires an additional step. If a citizen's preferences about policy consequences are the fundamental basis of vote choice, and if policies are a function of institutions, then his or her preferences about these institutions will be determined by the expected policy consequences of the institutions. Therefore, to develop hypotheses based on the rational choice model for specific apportionment initiatives, we have to consider the expectations and beliefs about the consequences of these initiatives discussed in historical accounts of them, as well as in discussions of apportionment in general in the political science literature.

Consider two general explanations for popular support for malapportionment. First, apportionment politics are often seen as an extension of the fundamental urban-rural division dominating political conflict in the first half of the twentieth century (Baker 1955; Dye 1965; Jewell 1962; McKay 1965). Indeed, Congress failed to reapportion the United States House of Representatives after the 1920 census because it showed that, for the first time, a majority of Americans lived in urban areas (Eagles 1990). And rural people had good reason to fight changes in apportionment, because once it occurred in the 1960s, policy shifted away from securing rural interests and toward serving urban interests, at least at the national level (McCubbins and Schwartz 1988). If expectations about the consequences of apportionment for the urban-rural policy conflict shaped voters' decisions on the initiatives in this study, then this geographic dimension should be reflected in the voting outcomes. Specifically, if the status quo apportionment system underrepresented urban areas, then we should expect urban voters' areas to support equal representation more.

Partisan and ideological considerations may also have shaped voters' decisions on these initiatives. Many scholars tested the contemporary conventional wisdom that making apportionment more equal would lead to

more Democrats in the state legislatures and more liberal state policy (Erikson 1973; Hofferbert 1966; Pulsipher and Weatherby 1968; Robeck 1972). This conventional wisdom was based on the assumption that Democratic areas tended to be underrepresented and so equalizing representation would increase the Democratic share of legislative seats. While some of these and later studies found that the partisan composition of state legislatures did indeed shift in a Democratic direction (Erikson 1971; Copeland and McDonald 1987), others found little evidence that the ideological direction of policy changed, and overall, the conclusions were mixed (Erikson 1973; Jacob 1964).<sup>6</sup> Recent scholarship on individual-level voting on ballot propositions suggests that partisanship may be a general factor influencing voters' decisions (Branton 2003), even though most ballot propositions are not officially linked to a party (Magleby 1984). Thus, the influence of partisanship on apportionment initiative voting remains an empirical question. The pre-*Baker v. Carr* conventional wisdom implies the hypothesis that if the status quo apportionment underrepresents Democratic areas, then more heavily Democratic areas should favor equal population apportionment more than less heavily Democratic areas.

Following the Supreme Court's apportionment cases in the 1960s, political conflict over representation shifted to questions of vote dilution in redistricting, and these battles largely revolved around race (Lublin 1997; Canon 1999). Indeed, one of the unintended consequences of the apportionment cases was that, in forcing states to redraw district lines, it provided opportunities for racial gerrymandering (McCrary and Lawson 2000). Although racial considerations were peripheral to most of the apportionment cases (since the disfranchisement of blacks prior to 1964 was done with other mechanisms, such as literacy tests), race was nevertheless the major factor in an earlier Supreme Court districting case, *Gomillion v. Lightfoot* (1960), and it was certainly a major dimension of political conflict at mid-century. Thus, voting on apportionment initiatives may have had an underlying racial component that scholars have missed. If voters anticipated that the political power of racial minorities would have been strengthened by equal apportionment and if the status quo favored geographic areas with fewer racial minorities, then support for changing apportionment should be greater in areas with more minorities.

Finally, these apportionment battles may simply have represented conflict over purely distributive concerns, especially with respect to the geographic distribution of public spending. Recent research has demonstrated the distributional consequences of political representation at both the national and state levels. For example, the equal representation of states in the United

States Senate leads to less populous states receiving greater federal spending per capita (Atlas et al. 1995; Lee 1998; Lee and Oppenheimer 1999). Even more directly related to my research question, Ansolabehere, Gerber, and Snyder (2002) found the degree of malapportionment in state legislatures before the 1960s was correlated strongly with the degree of inequality in state revenue transfers to counties. Thus, if voters were aware that public spending and political representation were linked, and if they based their voting on economic self-interest, they would support or oppose an apportionment measure depending on how it would affect their representation.

Thus, I have four hypotheses of the sources of voter support for these apportionment initiatives, all based on the notion that preferences for institutions are driven by preferences for the policy consequences of those institutions. Three of these hypotheses contend with social and political forces: urban-rural residence, partisanship, and race. For each of these dimensions, the hypothesis is that the underrepresented group will support apportionment initiatives that move toward equal representation. The fourth hypothesis focuses on purely distributive concerns in which support for an apportionment initiative depends on whether it increases voters' relative per capita representation. Note that these hypotheses are not mutually exclusive. The objective of the empirical analysis is to determine which factor, or mix of factors, shaped voters' choices on these mid-twentieth century apportionment initiatives.

## DATA AND VARIABLES

To test my hypotheses, I use data on 13 apportionment initiatives that were voted on between 1924 and 1962, six from California, three from Michigan, and two each from Oregon and Washington. A desirable feature of my data is that they are not limited to a single state or to a single time period, as has often been the case with initiative studies (Citrin and Sears 1982; Donovan and Snipp 1994; Gerber and Phillips 2003; Lupia 1994). Thus, my results are not dependent on one state's culture or political environment. Although my selection of initiatives for this study was based on the availability of data and does not exhaust the universe of apportionment initiatives, sufficient diversity exists among these states, initiatives, and time periods to allow for some generalization.<sup>7</sup> For example, California and Michigan are relatively populous states with major urban centers, while Oregon and Washington are more moderate in size with less skewed population distributions across counties, and the initiatives span fully 37 years. Furthermore, since my analyses focus on intrastate variation rather than explaining variation across states, selection bias presents less of a concern.

My dependent variable is the proportion of votes cast in favor of the apportionment initiative in each county. The data were collected from the appropriate issues with the official election returns of California's *Statement of Vote*, the *Michigan Official Directory and Legislative Manual*, Oregon's *Official Abstract of Votes*, and Washington's *Abstract of Votes*.

Although my theoretical discussion focuses on individual voting behavior, my data are by necessity gathered at the aggregate level since these initiatives occurred prior to the advent of modern survey research at the state level. I use county-level data for several reasons. First, the most readily available form of electoral data disaggregated below the state level is for counties. Second, county boundaries in these states did not change throughout the study period. In particular, county boundaries, unlike congressional and state legislative boundaries, are not themselves a function of the redistricting process. Finally, information matching counties to districts is more readily available than for other geographic or political units, which is important for measuring representation (as explained below).

Table 1 lists the 13 initiative measures I analyze, identified by state, year, and ballot number, along with basic descriptive information. The fourth column indicates whether historical accounts suggest that the measure was expected to make representation more equal (Hardy, Heslop, and Anderson 1981). The fifth column indicates whether the measure passed, and the last column shows the percentage of the vote supporting the measure.

The descriptions show that these proposals represent the diversity of rules relating to apportionment at that time. Three measures proposed changing representation away from the one-person, one-vote basis by providing for either a minimum or maximum number of representatives per county. Such limits disadvantage populous counties. Four of these measures proposed granting jurisdiction on apportionment to elected officials outside the legislature. This proposition reflected the belief that since legislative inaction was a main cause of unequal representation, the removal of authority from the legislature would improve apportionment equality (Baker 1955; Jewell 1962). Three of these measures proposed explicit boundaries for legislative districts, rather than using general rules (such as limits on the number of districts per county) that must be followed. The three remaining measures proposed changes toward population equality, of which only one required strict population equality.

I use two independent variables to test whether voter support for equal apportionment can be explained by urban-rural conflict. One is the *urban proportion* of the county's population, and the second is *farms per capita*, which captures the importance of agriculture in a county. The second mea-

Table 1. Initiative Measures Affecting Apportionment and Representational Equality

State	Year	Proposition Number	Description	Toward Representational Equality?	Passed?	Statewide Approval (%)
CA	1926	20	Reapportionment Commission: creates board of state elected officials to carry out reapportionment in case of legislative failure to act.	Y	N	39.32
CA	1926	28	Federal Plan: limits counties to no more than one state senator; also limits senatorial districts to no more than three counties.	N	Y	54.61
CA	1928	1	Referendum on apportionment act implementing Federal Plan. (A "yes" vote is in favor of the act.)	N	Y	54.84
CA	1948	13	State Senatorial Apportionment: raises per county limit to 10 senators; lifts limit on the number of counties per district.	Y	N	32.22
CA	1960	15	State Senatorial Apportionment: divides state into two regions (north and south) and allots 20 senators per region, distributed by population.	Y	N	35.5
CA	1962	23	State Senatorial Apportionment: expands state senate to 50 members; raises per county limit to six; retains limit of three counties per district.	Y	N	46.65
MI	1924	3	Reapportionment Commission: reapportionment authority transferred from the legislature to a board of state elected officials; to be carried out every eight years on the basis of qualified voters; establishes single-member districts.	Y	N	22.87

Table 1. (cont.)

State	Year	Proposition Number	Description	Toward Representational Equality?	Passed?	Statewide Approval (%)
MI	1930	4	Requires the state legislature to reapportion both chambers in the next session based on population; gives the secretary of state the authority to reapportion in case of legislative failure to act.	Y	N	41.59
MI	1952	2	Requires strict population equality for districts in both chambers.	Y	N	39.50
OR	1950	8	Sets a minimum of one representative per county and a maximum at 60 members in the house; increases the state senate size to 36.	N	N	47.01
OR	1952	18	Authorizes temporary apportionment until 1960 census; gives the secretary of state the authority to act in case of legislative failure; allows voters to petition the state supreme court to force compliance; provides for judicial review.	Y	Y	64.79
WA	1930	57	Increases the size of the state senate from 42 to 46; increases the size of the state house from 97 to 99; establishes single-member state senate districts to coincide with multi-member house districts, with a minimum of two representatives per district.	Y	Y	50.17
WA	1956	199	Redraws district lines and reapportions according to population.	Y	Y	52.45

sure helps assess the possibility that urban-rural conflict was driven by government support for agriculture and related interests. In several initiative campaigns, farm and agricultural organizations, such as the Farm Bureau, enthusiastically sponsored and supported measures that would have led to the overrepresentation of rural counties (Barclay 1951; Pitchell 1959). The data for these variables are from the nearest decennial census to the election date.

To test the partisanship hypothesis, I use a county's *normal vote*, measured as the average Democratic proportion of the two-party presidential vote over the nearest four election cycles (Converse 1966; Ansolabehere, Snyder, and Stewart 2000). I use these four elections so that short-term forces average out while the possibility of capturing long-term changes in partisanship is minimized. The independent variable for race is the proportion of non-whites in the county (*proportion minority*). I use the proportion of all minorities rather than the proportion of blacks because in the western states, Asian Americans and Latinos often outnumbered African Americans during the study period. Moreover, racial animosity in the west in the late-nineteenth and early-twentieth centuries (the early part of my study period) was usually directed against Asian and Latino labor (Almaguer 1994; Daniels 1962; Saxton 1971). Summary statistics for all independent variables are displayed in Table 2.

### *Measuring Change in Representation*

To quantify the potential effect each initiative would have had on political representation in a state, I measured per capita representation using the Relative Representation Index (RRI) (David and Eisenberg 1961; Ansolabehere, Gerber, and Snyder 2002).<sup>8</sup> The RRI is defined for a single legislative chamber as follows: Let  $i$  denote a county and  $j$  denote a legislative district. For each district, the number of representatives is  $M_j$  and the population is  $P_j$ ; the fraction of county  $i$ 's people in district  $j$  is  $f_{ij}$ . A county's per capita representation is then defined as

$$C_i = \sum_{\{j \mid i \cap j \neq \emptyset\}} f_{ij} \frac{M_j}{P_j}$$

Finally, the RRI is computed by dividing  $C_i$  by the average number of representatives per person in the state (i.e., number of representatives divided by total population) in order to normalize the measure across states and time.

This formulation of the RRI, allows me to capture the representation of counties that contain single- or multi-member districts (or both), overlap-

Table 2. Summary Statistics for Independent Variables

State	Year	Proposition Number	Proportion Favoring Initiative <sup>a</sup>	Proportion Urban	Farms Per Capita <sup>b</sup>	Normal Vote <sup>c</sup>	Proportion Minority <sup>b</sup>	Number of Counties
CA	1926	20	0.22 (0.09)	0.30 (0.27)	0.07 (0.04)	0.39 (0.06)	0.06 (0.06)	58
CA	1926	28	0.65 (0.08)	0.30 (0.27)	0.07 (0.04)	0.39 (0.06)	0.06 (0.06)	58
CA	1928	1	0.77 (0.10)	0.30 (0.27)	0.06 (0.04)	0.39 (0.06)	0.06 (0.06)	58
CA	1948	13	0.19 (0.07)	0.32 (0.27)	0.04 (0.02)	0.51 (0.08)	0.05 (0.05)	58
CA	1960	15	0.16 (0.10)	0.49 (0.30)	0.03 (0.02)	0.49 (0.07)	0.06 (0.07)	58
CA	1962	23	0.21 (0.13)	0.49 (0.30)	0.03 (0.02)	0.51 (0.07)	0.06 (0.07)	58
MI	1924	3	0.20 (0.05)	0.29 (0.27)	0.08 (0.04)	0.27 (0.05)	0.01 (0.01)	83
MI	1930	4	0.19 (0.11)	0.30 (0.27)	0.08 (0.04)	0.37 (0.06)	0.01 (0.02)	83
MI	1952	2	0.21 (0.09)	0.33 (0.27)	0.06 (0.03)	0.36 (0.09)	0.02 (0.03)	83
OR	1950	8	0.53 (0.08)	0.32 (0.22)	0.06 (0.02)	0.45 (0.05)	0.01 (0.02)	36
OR	1952	18	0.51 (0.15)	0.32 (0.22)	0.06 (0.02)	0.45 (0.05)	0.01 (0.02)	36
WA	1930	57	0.37 (0.18)	0.29 (0.25)	0.08 (0.04)	.047 (0.05)	.02 (0.03)	39
WA	1956	199	0.36 (0.18)	0.36 (0.27)	0.05 (0.03)	0.48 (0.06)	0.02 (0.03)	39

Note: Cell entries are means, with standard deviations in parentheses.

Sources: a. Official election returns; California *Statement of Vote*, Michigan *Official Directory and Legislative Manual*, Oregon *Official Abstract of Votes*, and Washington *Abstract of Votes*.

b. ICPSR Study #2896

c. ICPSR Study #0001

ping or multi-county districts, and any combination of them. For example, in 1950 Oregon's Linn and Lane counties each had a separate representative (with each whole county as a district) while also sharing another representative (the third district being composed of both counties). Suppose each of these counties had the same population,  $P$ , then each county's per capita representation would be  $1/P + 1/2P = 3/2P$ . If the average number of representatives per person were  $1/P$ , then the RRI for each county would be  $3/2$ , or 1.5.

A perfectly apportioned legislature according to the principle of one person, one vote would have a mean RRI of 1.0, with a standard deviation of 0. That is, all counties would have an RRI of 1.0. Otherwise, counties with RRIs greater than 1.0 are overrepresented, and counties with RRIs less than 1.0 are underrepresented. For purposes of analysis, since the RRI is a ratio measure, I convert them to logarithms (following Ansolabehere, Snyder, and Stewart 2002), so that a value of zero indicates a county has a fair share of representation. Finally, in my analysis, a county's RRI will be its average RRI across legislative chambers.

To measure the expected change in representation for any given initiative, I calculate the RRI for each county for both the apportionment in place at the time of the vote and the apportionment proposed by the initiative. Then I let the change in RRI be denoted as  $\Delta\text{RRI}$ , which is the difference between  $\log(\text{RRI}_{sq})$  and  $\log(\text{RRI}_a)$ , where the subscript  $sq$  denotes the status quo and  $a$  denotes the proposed alternative.

The RRI for counties under an existing apportionment is easily computed with the correspondence between counties and districts and population data. I culled these mappings from various state legislative rosters and manuals, and I obtained the population data from the decennial United States Census.<sup>9</sup>

The predicted effects of an apportionment proposed in an initiative are not so easily measured. The actual consequences of rejected measures are never observed, and even when an initiative does pass, there is often room for legislative maneuvering to produce deviations from the intended effects. Nevertheless, I assume that if an apportionment is approved and substantially unaltered by the legislature, then it provides a reasonable estimate for voter expectations going into the initiative.

Therefore, I made my calculations as follows. Three initiatives (CA 1926 #28, OR 1952, WA 1930) passed and modified the RRI; so for these initiatives, I calculate the RRI using the same technique as for the status quo RRI using the post-election apportionment. Those calculations are made in the same manner as for the status quo RRI.<sup>10</sup> Five initiatives (CA 1926 #20, MI 1924, MI 1930, MI 52, WA 56) would have essentially required apportionment based

on the one-person, one-vote standard, so I assumed that  $\log(\text{RRI})$  under these alternatives would be 0 for each county. Thus, for these initiatives, since  $\text{RRI}_a$  is 0,  $\Delta\text{RRI}$  is  $-\text{RRI}_{sq}$ . The remaining four initiatives (CA 1948, CA 1960, CA 1962, OR 1950) proposed deviations from equal-population districts and were rejected. I calculated the expected RRI for these initiatives based on population data and available information about the initiatives from the historical record (summarized in Table 1). For example, to calculate the expected RRI for the California initiative in 1948, I first computed the number of representatives each county would receive under equal representation, then I assigned the maximum of 10 state senators to the counties that would have received more than 10 state senators under equal representation, and then I distributed the remaining state senators to the remaining counties in proportion to their share of the remaining population.

Table 3 summarizes the RRI calculations for each initiative. I report the average value for counties in each state, with the standard deviation in parentheses. Columns four through six describe the apportionment situations under the status quo at the time of each initiative election, with a column for each chamber and one for the average of the two chambers. Columns seven through nine do the same for the estimated consequences of the initiative. Entries with dashes denote instances where the effect of the initiative was assumed to be equal-population districts (as described above). Asterisks indicate when an initiative would not alter the basis of representation for that legislative chamber, so I assumed that the RRI in those cases would not change. Finally, columns 10 through 12 give these values for the estimated difference between the status quo and the related initiative.

Note that the values in the twelfth column show that the average representational changes for counties from the passage of these initiatives are consistent with the categorization of these measures in Table 1 based on historical expectations about their effects on representational fairness. In that same column, also note that the absolute value of the average differences for Oregon and Washington are generally much smaller than those for California and Michigan, demonstrating that the latter two states' apportionment initiatives would have had more drastic effects.

## RESULTS

To test my hypotheses, I estimated a series of linear regression equations using ordinary least squares (OLS) estimation. The dependent variable is the proportion of votes in a county voting in favor of the initiative. The

Table 3. The Relative Representation Index (RRI)—Summary Statistics

State	Year	Proposition Number	Status Quo				Initiative				Difference						
			Senate	House	Average	Senate	House	Average	Senate	House	Average	Senate	House	Average	N		
CA	1926	20	0.30 (0.44)	0.46 (0.46)	0.38 (0.39)	—	—	—	—	-0.30 (0.44)	-0.46 (0.46)	-0.38 (0.39)	58	—	—	—	—
CA	1926	28	0.30 (0.44)	0.46 (0.46)	0.38 (0.39)	1.00 (0.94)	1.00 (0.94)	0.16 (0.28)	0.16 (0.28)	0.58 (0.55)	0.71 (0.88)	0.71 (0.88)	-0.30 (0.38)	-0.30 (0.38)	0.20 (0.38)	—	58
CA	1928	1	0.33 (0.46)	0.50 (0.48)	0.42 (0.42)	1.04 (0.96)	1.04 (0.96)	0.20 (0.30)	0.20 (0.30)	0.62 (0.57)	0.71 (0.89)	0.71 (0.89)	-0.30 (0.38)	-0.30 (0.38)	0.21 (0.38)	—	58
CA	1948	13	1.10 (1.03)	0.02 (0.27)	0.56 (0.56)	0.40 (0.23)	0.40 (0.23)	*0.21 (0.20)	*0.21 (0.20)	-0.70 (0.85)	—	*	-0.35 (0.43)	-0.35 (0.43)	58	—	58
CA	1960	15	1.23 (1.18)	0.13 (0.33)	0.68 (0.68)	0.15 (0.17)	0.15 (0.17)	*0.14 (0.21)	*0.14 (0.21)	-1.08 (1.14)	—	*	-0.54 (0.57)	-0.54 (0.57)	58	—	58
CA	1962	23	1.23 (1.18)	0.13 (0.33)	0.68 (0.68)	1.09 (1.01)	1.09 (1.01)	*0.61 (0.61)	*0.61 (0.61)	-0.14 (0.60)	—	*	-0.07 (0.32)	-0.07 (0.32)	58	—	58
MI	1924	3	0.24 (0.24)	0.32 (0.42)	0.28 (0.29)	—	—	—	—	—	—	-0.24 (0.24)	-0.32 (0.42)	-0.32 (0.42)	-0.28 (0.29)	—	83
MI	1930	4	0.46 (0.35)	0.52 (0.40)	0.49 (0.35)	—	—	—	—	—	—	-0.46 (0.35)	-0.52 (0.40)	-0.49 (0.35)	-0.49 (0.35)	—	83
MI	1952	2	0.53 (0.45)	0.38 (0.34)	0.46 (0.36)	—	—	—	—	—	—	-0.53 (0.45)	-0.38 (0.34)	-0.46 (0.36)	-0.46 (0.36)	—	83
OR	1950	8	0.17 (0.83)	0.32 (0.52)	0.25 (0.59)	*	*	0.46 (0.84)	0.46 (0.84)	0.32 (0.71)	—	*	0.14 (0.61)	0.14 (0.61)	0.07 (0.30)	—	36
OR	1952	18	0.18 (0.84)	0.33 (0.54)	0.25 (0.60)	0.16 (0.22)	0.16 (0.22)	0.17 (0.32)	0.17 (0.32)	0.16 (0.21)	—	-0.02 (0.81)	-0.16 (0.35)	-0.09 (0.50)	-0.09 (0.50)	—	36
WA	1930	57	0.17 (0.50)	0.44 (0.70)	0.31 (0.52)	0.12 (0.26)	0.12 (0.26)	0.15 (0.19)	0.15 (0.19)	0.13 (0.22)	—	-0.05 (0.44)	-0.30 (0.64)	-0.18 (0.45)	-0.18 (0.45)	—	39
WA	1956	199	0.21 (0.50)	0.24 (0.49)	0.23 (0.49)	—	—	—	—	—	—	-0.21 (0.50)	-0.24 (0.49)	-0.23 (0.49)	-0.23 (0.49)	—	39

Note: These RRIs are in a log scale. Mean RRIs for states are reported, with standard deviations in parentheses.

\* Indicates that the same values were used for the alternative as for the status quo.

— Indicates that log (RRI) is assumed to be 0 for all observations because the initiative would have effectively required one person, one vote.

independent variables are the proportion of a county's population that lives in an urban area, the number of farms per capita, the normal vote, the minority proportion of its population, and the expected change in per capita representation,  $\Delta \log$  (RRI).

The results are presented in Table 4, where each row reports the results of a separate regression. The first three columns identify the initiatives. The next six columns report the estimated coefficients, with standard errors in parentheses, followed by the adjusted  $R^2$  and the number of observations. Overall, the fit of the model to these data indicates that the independent variables together account for much of the variation in the vote. The highest  $R^2$  is 0.68, the lowest is 0.21, and the average is 0.49.

The main pattern that stands out across the regressions for these initiatives is that the expected changes in the fairness of representation (the distributional consequences) are consistently related to voter support for all of these apportionment plan changes, while the other factors are related to support for only some of the initiatives. The estimated coefficient for  $\Delta \log$  (RRI) is statistically significant at the .05 level for all but one of the initiatives. For the remaining initiative (CA 1926 #28), the p-value for the estimated coefficient is 0.057. Just as important is that all of the estimated coefficients are positive, which means that voter support was stronger in counties that expected to get fairer representation in the state legislature. Thus, these results provide evidence that voters prefer more representation to less, supporting the hypothesis that expectations about the distributive consequences of apportionment shaped preferences over alternative bases of representation. That I find this relationship holds in a variety of different initiatives, states, and years indicates that it is a quite general pattern and that it is not a function of the specific conditions of individual states or campaigns.

To help understand the magnitude of these estimated coefficients, consider California's Proposition 20 in 1926. Under the state legislative apportionment in effect in 1926, Los Angeles County was underrepresented, and its expected  $\Delta$ RRI was  $-0.61$ . San Francisco County, on the other hand, was overrepresented, with  $\Delta$ RRI of  $0.32$ . All else equal, the estimated effect of the expected change in representation accounts for a difference in support between these two counties of approximately 9.9 percentage points, a considerable margin in an initiative vote. Even more extreme, in Washington's 1930 initiative, Jefferson County had a  $\Delta$ RRI of  $-0.72$ , and King County had a  $\Delta$ RRI of  $0.32$ . All else equal, the difference in the vote is predicted to be approximately 26.0 percentage points due to the difference in RRI.

The urban-rural hypothesis receives the most support of the three addi-

Table 4. Effects of Relative Representation, Urban-Rural Residency, Partisanship, and Race on County-Level Support for Apportionment Initiatives, 1924-1962

State	Year	Proportion		$\Delta \log(\text{RRR})$	Farms Per Capita	Normal Vote	Proportion		Constant	Adjusted R <sup>2</sup>	N
		Number	Urban				Minority	Minority			
CA	1926	20	-0.077	0.106** (0.033)	-1.272** (0.316)	-0.078 (0.196)	-0.249 (0.173)	0.409** (0.095)	0.39	58	
CA	1926	28	0.093	0.051 (0.026)	1.228** (0.269)	0.055 (0.165)	0.466** (0.149)	0.477** (0.083)	0.37	58	
CA	1928	1	0.029	0.085* (0.034)	1.447** (0.363)	0.185 (0.215)	0.016 (0.194)	0.581** (0.108)	0.37	58	
CA	1948	13	-0.025	0.095** (0.026)	-1.617** (0.317)	-0.063 (0.095)	0.032 (0.144)	0.319** (0.070)	0.64	58	
CA	1960	15	0.016	0.085* (0.032)	-1.429* (0.566)	-0.562** (0.149)	-0.122 (0.163)	0.525** (0.098)	0.47	58	
CA	1962	23	0.132*	0.289** (0.081)	-1.548* (0.637)	-0.731** (0.172)	-0.396* (0.184)	0.605** (0.099)	0.55	58	
MI	1924	3	-0.044	0.051* (0.024)	-0.392 (0.212)	-0.344** (0.107)	0.475 (0.416)	0.344** (0.034)	0.21	83	
MI	1930	4	-0.007	0.175** (0.034)	-0.692* (0.292)	0.137 (0.174)	0.648 (0.502)	0.279** (0.072)	0.55	83	
MI	1952	2	-0.096**	0.142** (0.021)	-0.386 (0.256)	0.493** (0.083)	0.258 (0.171)	0.151** (0.040)	0.68	83	
OR	1950	8	0.054	0.150** (0.044)	0.613 (0.652)	0.031 (0.219)	1.102 (0.593)	0.434** (0.116)	0.32	36	
OR	1952	18	-0.107	0.160** (0.038)	-2.660** (0.963)	-0.233 (0.324)	-1.213 (0.889)	0.843** (0.165)	0.49	36	
WA	1930	57	-0.062	0.249** (0.052)	-0.978 (0.930)	-0.975 (0.518)	0.994 (0.674)	0.940** (0.284)	0.51	39	
WA	1956	199	0.155	0.277** (0.041)	-0.090 (1.010)	-0.273 (0.364)	0.796 (0.568)	0.485* (0.221)	0.67	39	

\*p<.05; \*\*p<.01

Note: Each row represents a different regression analysis, using county-level data for the proposition indicated in the first three columns. The dependent variable is the proportion in each county supporting that initiative, and the regression coefficients are estimated using OLS.

tional factors, although it appears to have a consistent influence only in California. Of the estimated coefficients for the two urban-rural variables, farms per capita is statistically significant for all of the California initiatives, as well as for the 1930 Michigan initiative, and the 1952 Oregon initiative, but for neither of the Washington initiatives. The signs of the estimated coefficients for farms per capita are all consistent with the hypothesis that voters in farming districts expected fairer representation to be politically costly for them. In contrast, the percentage of urban residents has a statistically significant estimated effect on the vote only for the California 1962 and Michigan 1952 initiatives. This result suggests that anecdotes about urban-rural conflict on these issues had more to do with agriculture than with the type of environment in which people lived, which coincides with historical accounts that emphasize the role of farm interest groups in the initiative campaigns, especially in California (Barclay 1951; Pitchell 1961).

Partisanship, as measured by the normal presidential vote, has a statistically significant effect on the vote for only four of these 13 initiatives. Two of these are California's later initiatives, in 1960 and 1962. However, the signs of the estimated coefficients are negative, meaning that the more Democratic a county, the lower its vote for population equality. This outcome contrasts with research showing that changes in apportionment helped pro-Democratic urban areas (Erikson 1971). One possible explanation for this unexpected result is that by the later period, urban areas had reached the peak of their population growth and altering apportionment would not only give greater representation to Democratic urban areas, but also to the growing Republican suburbs (Ansolabehere and Snyder 2004). Another possible reason for these unexpected signs might be that the Democrats in California had become the majority party in both chambers of the state legislature by 1960, perhaps producing a bias toward the status quo among Democratic voters. The estimated coefficient for the normal vote also remains statistically significant for two of Michigan's initiatives, in 1924 and 1952. However, the signs of these estimated coefficients run in opposite directions, even though Democratic areas are underrepresented in both years.

My results also suggest that race played a minor role, at most, in voters' decisionmaking on these initiatives. In California, the proportion of racial minorities is estimated to be positively related to the vote on Proposition 28 in 1926 and negatively related to the vote in 1962. It is not estimated to have a statistically significant effect on voting in any other initiatives in my study, and the signs of the estimated coefficients are not consistently in one direction.<sup>11</sup>

## CONCLUSION

My county-level analysis of votes on apportionment initiatives in these four states across a nearly 40-year span leads me to two main conclusions about how people made voting decisions on these institutions of representative democracy. First, if people expected a new plan to increase their representation in the state legislature, they were more likely to support it. Second, while urban-rural composition, agriculture, partisanship, and race all influenced the vote on apportionment initiatives sometimes, they played a much less consistent role than the expected change in the county's representation.

My analyses also reflect notable differences across states in the influences on voting for these initiatives. The politics of apportionment reform in California revolved mainly around both the distribution of representation and the agricultural dimension. Later, partisanship also had an effect. In Michigan, the factors were a mix of distributive, urban-rural, and partisan considerations. In Oregon and Washington, all that seemed to matter was how the new plan changed the distribution of representation in the states. This distinction suggests that the precise mix of voting considerations on institutional reform initiatives depends on a state's unique political environment. Although explaining these cross-state differences is beyond the scope of this study, it appears that they may be divided into two groups, the populous California and Michigan, where popular support for apportionment initiatives was affected by a mix of distributive and additional dimensions of policy conflict; and the medium-sized Oregon and Washington, where only simple distributive politics shaped support for reform.

What does this study imply about the democratic selection of representative institutions more broadly? Does the choice of institutions come down to choosing "among competing theories of political philosophy," as Supreme Court Justice Felix Frankfurter suggested in his dissent to *Baker v. Carr* (369 U.S. 300)? On the contrary, my analysis suggests that political battles over apportionment in the electoral arena reflected not competing normative theories of representation but, rather, simple political self-interest. While this conclusion is broadly consistent with the assumption of instrumental political behavior, my study suggests that self-interest may be both multi-dimensional, with distributive and other bases of conflict, and contextual, depending on the political environment of the state. My central empirical finding is that the distributive component of self-interest—that people vote to increase their own representation—is a common denominator in voting on the bases of representation, while the relevance of other components are

context specific. This supports the general proposition that when voters care about the policies produced by a political institution and when different institutional arrangements lead to different policies, voters' preferences for an institutional arrangement are strongly influenced by their expectations about the policy consequences of that institution. Thus, even when the impacts of a policy decision are indirect, as they were with decisions about institutional arrangements, voters make rational choices.

#### ENDNOTES

1. Significant deviation from population equality is typically referred to as "malapportionment." In states without the initiative, malapportionment typically resulted from differential population growth combined with legislative inaction (Baker 1955; Hardy, Heslop, and Anderson 1981).

2. In 1960, Los Angeles County had over six million residents, while Inyo and Mono counties had a combined population of around 14,000.

3. However, the Washington state legislature altered the 1956 apportionment substantially (Bushnell 1970).

4. Dixon and Key contribute little regarding the subject. For example, Key (1956, 84) does not say much more than: "When they have had a chance to vote on the [legislative apportionment institutions], state voters have sometimes approved, sometimes disapproved."

5. Voters have a third choice—to abstain—but since the outcome of an initiative is based on the approve/disapprove votes, these are of concern here.

6. See Bicker 1971 for a methodological critique of this literature.

7. I identified 36 apportionment-related ballot measures across nine states. Unfortunately, I was only able to obtain county-level voting returns for the 13 measures analyzed in this study. The other states with apportionment initiatives were Arizona, Colorado, Missouri, and Oklahoma. While my sample of states and initiatives was not drawn randomly, there is no reason to expect that the current availability of voting data on these measures is correlated with voting behavior, so the sample is probably not biased for my purposes.

8. David and Eisenberg (1961) call this the Right-to-Vote-Index, while Ansolabehere, Gerber, and Snyder (2002) use the less normative label Relative Representation Index. I adopt the latter convention.

9. The sources for legislative district maps are Allen 1965, the *Michigan Manual*, the *Oregon Blue Book*, and Washington state's *Legislative Manual*.

10. Because the 1956 apportionment approved by voters in Washington was significantly altered by the legislature before going into effect, I do not use this procedure for that initiative (Bushnell 1970; Hardy, Heslop, and Anderson 1981).

11. All of the estimated coefficients in the model are statistically significant only for California's Proposition 23 in 1962. Comparing the magnitudes of estimated effects for that proposition suggests that when all these factors influence the vote, no single factor dominates it with voters weighing each of the competing factors in forming expectations about the consequences of changes in this institution.

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