The Rising Incumbent Reelection Rate: What's Gerrymandering Got to Do With It?

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Abstract

The probability that an incumbent in the United States House of Representatives is reelected has risen dramatically over the last half-century; it now stands at more than 98%. A number of authors and commentators claim that this rise is due to an increase in bipartisan gerrymandering in favor of incumbents. Using a regression discontinuity approach, we find evidence of the *opposite* effect. All else equal, redistricting has reduced the probability of incumbent reelection over time. The timing of this effect is consistent with the hypothesis that legal constraints on gerrymandering, such as the Voting Rights Act, have become tighter over time. Incumbent gerrymandering may well be a contributor to incumbent reelection rates, but it is less so than in the past.

Keywords: Gerrymandering, incumbent, redistricting.

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1 Introduction

In each of the last four Congressional elections, more than 97.9% of incumbents who ran again were reelected. Indeed, there has been a noticeable upward trend in incumbent reelection rates over the last half century (see Figure 1). Many have seen this as a worrying trend; for instance, in one article these facts led *The Economist* to compare the state of democracy in America to that in North Korea[1]. Of course, the increasing rate of incumbent success is not necessarily problematic. de Tocqueville (2004), for instance, noted that

> ...preventing the re-election of the chief magistrate would deprive the citizens of the surest pledge of the prosperity and the security of the commonwealth; and, by a singular inconsistency, a man would be excluded from the government at the very time when he had shown his ability in conducting its affairs[2].

[Figure 1 Here]

Regardless of one's stance on the desirability of the rising incumbent reelection rate, it is natural to ask what has caused this trend.

A series of papers have carefully investigated the components of the incumbent advantage. Ansolabahere et al. (2000) use the change in districts after census years to distinguish between the incumbent advantage for "old" voters (those voters previously in a Representative's district) and "new" (recently added) voters. They find that two-thirds of the incumbent advantage is concentrated among "old" voters. Levitt and Snyder (1997) find that pork

[1] "Pyongyang on the Potomac?; The congressional elections," The Economist, September 18, 2004.

[2] It must be noted that, on balance, Tocqueville had a negative view of the possibility of reelection on the President. He states "But by introducing the principle of re-election they partly destroyed their work; and they rendered the President but little inclined to exert the great power they had vested in his hands. If ineligible a second time, the President would be far from independent of the people, for his responsibility would not be lessened; but the favor of the people would not be so necessary to him as to induce him to court it by humoring its desires. If re- eligible (and this is more especially true at the present day, when political morality is relaxed, and when great men are rare), the President of the United States becomes an easy tool in the hands of the majority. He adopts its likings and its animosities, he hastens to anticipate its wishes, he forestalls its complaints, he yields to its idlest cravings, and instead of guiding it, as the legislature intended that he should do, he is ever ready to follow its bidding. Thus, in order not to deprive the State of the talents of an individual, those talents have been rendered almost useless;and to reserve an expedient for extraordinary perils, the country has been exposed to daily dangers."

barrel spending in a district helps incumbents, while Levitt (1994) suggests that campaign spending has little impact on the outcomes of Congressional races. The literature has had less success isolating the causes of the rising incumbent reelection rate. Ansolabehere et al. (2004) argue that the introduction and proliferation of television cannot explain the rising incumbent reelection rate. Levitt and Wolfram (1997) argue that decreasing challenger quality has been the primary driver of the rise. This, however, leaves the decrease in challenger quality unexplained. Cox and Katz (1996) and Cox and Katz (2002) claim that the cause is the interaction between gerrymandering and challenger quality. Unfortunately they do not present systematic evidence to support this intriguing claim.

The political science literature has investigated these claims in several ways. Ansolabehere and Snyder (2002) and others show that the incumbency advantage in non-redistricting offices, such as US Senators and state governors, grew at roughly the same rate and at the same time as for redistricted offices. Though suggestive, this line of research of course leaves open the possibility that different forces affect the reelection prospects of these different elected positions. Burnham (1970) and Gross and Garand (1984), among others, show that the proportion of "marginal districts" has declined over time in ways that are inconsistent with redistricting as an explanation. These analyses focus on margin of victory as a measure of incumbent strength, which, as we discuss more below, suffers from serious endogeneity problems. Similarly, Gelman and King (1994) estimate changes in the "responsiveness" and "bias" of districting plans as affected by redistricting and find that redistricting tends to increase electoral responsiveness, implying that each party's share of seats in the legislature is more sensitive to changes in its underlying vote share. These estimates of "responsiveness" and "bias" rely on the particular model used to construct electoral counterfactuals in Gelman and King (1993), a parametric assumption we seek to avoid, as well as suffering from its reliance on voteshares. Most in the spirit of our analysis, Ferejohn (1977) and more recently Abramowitz (2004) compare reelection rates in years immediately before redistrictings with those immediately after and find little difference. Because we use all years of data, though, we can distinguish between the discreet impact of redistrictings and more gradual changes in the reelection rates, such as those which might follow an increase

in polarization, for instance. We can also allow for different short run and long run effects of redistricting, as well as control for other covariates as is possible in regression analysis.

Although the political science literature has had limited success in identifying the cause of the rising incumbent reelection rate, legal scholars and public intellectuals seem to have little doubt that redistricting–specifically incumbent-protecting gerrymandering–is the culprit. They argue that technological improvements, bearing on the redistricting process, have effectively allowed representative to chose their voters, rather than the converse. The following quotations are instructive.

> "Although elections may be uncompetitive for many reasons – including money in politics and the declining prestige of political service – the role of incumbent protection through the redistricting process is undeniable. Thanks to the wizardry of computer programs that draw incumbent-safe districts with ease." Common Cause[3]

> "Bipartisan gerrymandering is emerging as a new, equally serious but different kind of threat to American democracy. Congressional elections in the wake of the 2000 round of redistricting were the least competitive of any general elections in United States history, with redistricting a central reason...Bipartisan gerrymanders increasingly make election day for representative bodies an empty ritual." Pildes (2004)

Recently three states–Florida, Ohio and California–held referenda on whether to place redistricting in the hands of bipartisan panels of retired judges. In the widespread press coverage of the issue a popular wisdom has emerged that gerrymandering is killing political competition in America and rendering intractable problems which require bipartisan support. Thomas Friedman of the New York Times recently put it this way:

> "And it is the yawning gap between the huge problems our country faces today - Social Security reform, health care, education, climate change, energy - and

[3] "Democracy on its head" by Pamela Wilmot, Executive Director, Common Cause Massachusetts.

> the tiny, fragile mandates that our democracy seems able to generate to address these problems that is really worrying. Why is this happening? Clearly, the way voting districts have been gerrymandered in America...is a big part of the problem."[4]

The evidence presented to support these claims appears to be that, over the past two decades, technology available to redistricters has become more sophisticated and, over the same time frame, the incumbent reelection rate has risen. *Post hoc ergo propter hoc*[5]. In this paper we take a more systematic approach to understanding the impact of redistricting on the incumbent reelection rate.

In this paper, we investigate whether gerrymandering has, in fact, contributed to the increase in the incumbent reelection rate. We exploit the fact that, until 2004, redistricting (that was not court ordered) took place only once each decade. On the other hand, secular trends in such matters as campaign finance, voter polarization, and the media evolve in a continuous fashion. Thus, following VanderKlaauw (1997), we are to able identify the impact of gerrymandering based on this discontinuous treatment. As in van der Klaauw's original application, we separate the changes in incumbent reelection rates into smooth and continuous changes and jumps between discrete buckets, in our case redistrictings.

We find that a smooth function in time explains more than 100% of the increase in the incumbent reelection rate, while the decennial discontinuities are negative. This runs counter to the prevailing sentiment about the impact of gerrymandering. It implies that gerrymandering has become *less* incumbent-friendly over time. We also test for differences in incumbent reelection rates between redistrictings that occurred during partisan or bi-partisan governments, and we can find no significant difference. Finally, our results show that reelection rates, on average, are slightly higher in the election immediately following a redistricting, rather than lower (as many have speculated).

Although technology available to gerrymanderers has unquestionably improved over time (see, e.g. Brace (2004)), so have the constraints placed on them by statute and Supreme

[4]Thomas L. Friedman, "Thou Shalt Not Destroy the Center", *New York Times*, November 11, 2005.
[5]From the Latin meaning "After this therefore because of this."

Court rulings. Our results suggest that the latter force has been the more powerful one. Furthermore, we find a large and statistically significant negative discontinuity before the 1992 round of redistricting. A natural interpretation of this is that the Voting Rights Act 1982 (Amended) significantly constrained gerrymanderers. This legislation came into force *after* the 1982 round of redistricting but prior to the 1992 round.

The rest of this paper is organized as follows: Section 2 presents and discusses the relevant legal and political background. Section 3 describes our empirical methodology and data sources, while Section 4 presents the main empirical results in this paper and some robustness checks. Section 5 concludes and discusses the broader implications of our work.

2 Background

In this section we make three points. First, we ground the basic ideas by distinguishing between partisan and incumbent gerrymandering. Second, we describe some of the technological advancements which have made gerrymandering (of both types) more effect over time. Third, we describe the legal backdrop against which gerrymandering takes place - and argue that the entry of the United States Supreme Court in the "political thicket" in the early 1960s, the Voting Rights Act of 1965, and then the amendments to it in 1982 have increasingly constrained gerrymanderers.

The literature on gerrymandering distinguishes between partisan and incumbent gerrymandering. Partisan gerrymandering is the redrawing of political lines to favor a particular political party. Incumbent gerrymandering is the redrawing of boundaries in a bipartisan manner, in order to benefit incumbents on both sides of the aisle.

The advent of sophisticated map and computer technology means that legislators can draw districts more finely than ever before. In the 1970s, districting plans were extremely labor intensive to create and difficult to change. Constructing a plan literally required hours of drawing on large floor-maps using dry-erase markers. Now lawmakers use Census TIGERLine files to create and analyze many alternative districting schemes both quickly and accurately. This allows very granular analysis and fine tuning of districts. For instance, the

Florida 22nd congressional district comprises a coastal strip not more than several hundred meters wide in some places but ninety miles long. The Illinois 4th, drawn to include large Hispanic neighborhoods in the North and South of Chicago but not much in between; in some places the district is no more than one city block wide, and such necks are often narrower than 50 meters. Other similar examples abound.

Article I, §4 of the United States Constitution leaves election law to the states, subject to regulation by Congress. It provides that "The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of chusing Senators." For a long time this meant that incumbent gerrymandering was constrained only by state election law and state constitutions.

In 1962, however, the Supreme Court ruled in *Baker v. Carr* 369 U.S. 1862 (1962) that violations of one-person-one-vote violated the Equal Protection Clause of the Fourteenth Amendment. In *Westberry v. Sanders* 376 U.S. 1 (1964) the Court further held that Congressional districts must contain populations which are "as nearly equal as possible" - and that Federal Courts were empowered to impose their own district plan as part of their remedial powers. The Court subsequently applied a similar standard for state legislative districts in *Reynolds v. Sims* 377 U.S. 533 (1964) and for local government districts in *Avery v. Midland County* 390 U.S. 474 (1968). As a consequence of these decisions, incumbent gerrymandering is constrained so as not to violate the Equal Protection Clause.

A second set of additional constraints were imposed on incumbent gerrymandering by the 1982 amendments to the Voting Rights Act ("VRA"). The original (1965) VRA had mixed success in curbing various practices of racial vote dilution. The *constitutional* prohibition (established in *Baker v. Carr*) of vote dilution was subject to the so-called "discriminatory purpose test" which the Court delineated in *Washington v. Davis* 426 U.S. 229 (1976). This made it extremely difficult for plaintiffs - since they had to show that a particular practice was *intentionally* discriminatory. This high burden was, in practice, almost never met - see for instance *Nevett v. Sides* 571 F.2d 209 (5th Cir. 1978), *cert. denied* 446 U.S. 951 (1980) and *City of Mobile v. Bolden* 446 U.S. 55 (1980). As Issacharoff et al.

(2002) note "After the Supreme Court decided *Bolden*, vote dilution litigation virtually shut down." The 1982 amendments to section 2 of the VRA were important because they removed the requirement that plaintiffs show a discriminatory *purpose*. The test which the Court adopted in interpreting the amended VRA, in *Thornburg v. Gingles* 478 U.S. 30 (1986), made the plaintiff's burden in vote dilution litigation substantially lighter. This constrained incumbent gerrymandering since, if racial vote dilution was a by-product of such gerrymandering, the districting plan may be rejected.

3 Empirical Strategy and Data

3.1 Empirical Methodology

There are many potential drivers of an incumbent's reelection chances. If we could accurately measure each of these variables, we could control for them to recover the effect of gerrymandering in those years when redistricting took place. Some of these variables we can measure: for instance, we control directly for economic variables, seniority, and the political cycle of midterm and presidential election years. Unfortunately, though, most of these variables are difficult, if not impossible, to measure. For instance, even the most well-designed measure of general public confidence in government would likely be insufficient to remove concerns about omitted variable bias from our specification.

Instead, this paper identifies the effect of gerrymandering by separating continuous changes from discrete jumps in the probability of incumbent reelection. Before 2004, states only redistricted (with a few exceptions) preceding Congressional elections that followed Census years.[6] Thus, the primary impact of gerrymandering should appear as a discontinuous movement in the probability of reelection at the decadal redistricting. In contrast, most of the other variables that may affect the reelection probability vary more continuously over

[6]There are two classes of exceptions to this pattern. First, Maine, Hawaii (in 1982), and Montana (in 1984) conducted the Constitutionally mandated decadal reredistricting in off-years. We take account of these issues of timing in our empirical specifications. Second, federal courts (after *Wesberry*) occasionally declared particular districts unconstitutional in the middle of a decade, resulting in states being required to redraw boundaries. Such changes were always directed at precisely the problems identified by the courts, and, as such, did not much affect the composition of districts.

time. By including both a high-dimensional polynomial (a flexible but continuous function) and a step-function, with its jumps in redistricting years, in a regression, we can separate the impact of redistricting while simultaneously controlling for the other important variables which may also have changed over time. This technique mirrors that applied by Lee et al. (2004) to the relationship between candidates, public support, and political positioning. In particular, we use smooth cubic splines (following VanderKlaauw (1997)) to control for smooth changes. We also conduct extensive robustness checks with high-order polynomials. The key identifying assumption is that all factors unrelated to gerrymandering change continuously over time, and thus are "picked up" by the flexible smooth function in time.

Though much of the redistricting literature uses incumbent voteshare as the dependent variable, we instead focus on the outcome of the election, a dummy variable equal to 1 if the incumbent was reelected. We do so for two reasons. First, an incumbent's goal is to gain reelection, not necessarily to maximize voteshare. Thus, a simple dummy variable for reelection is a more direct measure of an incumbent's electoral success than voteshare. Second, because incumbents may not care about voteshare per se, it is less clear how it will respond to a favorable redistricting. For instance, if an incumbent appears unbeatable, voters may feel more able to vote non-strategically, perhaps supporting a favored minor candidate or not turning out to vote at all. In this case, an incumbent's voteshare might actually decrease, though her probability of reelection would have increased. The major drawback to our measure is the inherent noise in a binary outcome variable relative to a continuous underlying measure. But this weakness biases the analysis against us, since the less precise estimation yields higher standard errors.

Our primary specification is

$$Y_{rst} = \alpha + \beta X_{rst} + g_t + \gamma_t Gerry_{st} + \eta_s + \varepsilon_{rst}$$

where Y_{rst} is a dummy variable, equaling one if representative r in state s in year t is reelected to Congress, η_s denotes a vector of dummy variables for each state, g_t is the smooth flexible function in time discussed above, and X_{rst} is a vector of control variables,

including: U.S. aggregate-level economic growth, a dummy variable for a midterm election, a dummy variable for being in the same party as the president, an interaction between these last two, and whether the incumbent is a first-time Congressman. Our base specification is a linear probability model, though we also replicate all our results using logit and probit models. Finally, $Gerry_t$ denotes a vector of dummy variables that picks up the effect of each redistricting "scheme" within a state. In a state s that redistricted only in years 1972, 1982, etc..., a piece of this variable would be

$$\begin{pmatrix} Gerry_{s,1970} \\ Gerry_{s,1980} \\ Gerry_{s,1990} \end{pmatrix} = \begin{array}{c} \\ \\ \\ \end{array} \begin{array}{c} t = \\ \begin{pmatrix} 1 & \cdots & 1 & 1 & \cdots & 1 & 1 & \cdots \\ 0 & \cdots & 0 & 1 & \cdots & 1 & 1 & \cdots \\ 0 & \cdots & 0 & 0 & \cdots & 0 & 1 & \cdots \end{pmatrix} \end{array}$$

$$\begin{array}{c} \\ \\ \\ \end{array} \begin{array}{c} \\ 1972 \quad \cdots \quad 1980 \quad 1982 \quad \cdots \quad 1990 \quad 1992 \quad \cdots \end{array}$$

The coefficients measured on this system of dummies variables, denoted above by γ_t, estimate the marginal impact of each round of gerrymandering on the incumbent reelection probability. For instance, γ_{1970} measures the marginal impact of the 1970s round of redistricting relative to that in the 1960s, and so on.

We begin the empirical analysis in this paper by assuming that the "jump" from redistricting each decade is constant, or that $\gamma_t = \gamma$. We then explore less restrictive assumptions, allowing the impact of redistricting to vary across decades. In our final specifications, we further allow the effect of gerrymandering to vary across different state political arrangements at the time of redistricting (that is, bipartisan vs. partisan vs. court ordered gerrymandering). It is important to note that γ_t can only measure changes in the impact of redistricting across states and time. Any constant or base effect is indistinguishable from the regression constant.

3.2 Data

Our data primarily comprise historical records of Congressional elections. We construct a panel from 1898 through 2004 by combining a dataset compiled by Cox and Katz (ICPSR Study 6311) with one graciously provided to us by Gary Jacobson. These datasets provide information on the winner of each Congressional election, whether an incumbent (or more) was involved, and the party of the incumbent. These datasets also indicate whether the incumbent was a freshman.[7]

We augment these data with a number of covariates. We gather data on real U.S. aggregate-level GNP growth from the Economic Report of the President (2005) (Table B-2, computed from Column 11: Real GNP)[8]. We only have data on economic growth from 1914-2004; this becomes the "long" period in our dataset.

We also classify each redistricting since 1970 as Bipartisan, Court Ordered, Partisan Democrat, or Partisan Republican. To do so we researched the political situation in each state and the outcome of the redistricting process using a number of different sources.[9] If one party controlled all relevant branches of state government at the time of redistricting, we classify it as Partisan. If neither party controlled all relevant branches, then we classify it as Bipartisan. If a federal court actually implemented its own redistricting plan after the state government failed to do so, we classify it as Court Ordered. We provide our entire dataset in the Appendix. Some authors have similarly classified redistrictings, though have done so based on the actual outcomes of the political negotiations surrounding the process. But these judgements may not only be endogenous to the process, but tainted in hindsight by the actual outcomes of the elections that followed. We prefer our measure, as it relies solely on objective and preexisting political conditions.

[7] In addition, we know whether each freshman incumbant served a full two-year term or replaced the previous incumbent more recently for each election since 1972.

[8] Data from earlier years can be found in Alesina and Rosenthal (1995).

[9] These sources include a very helpful online state-by-state index of gerrymandering at www.fairvote.com, contemporary news articles from national and local sources, and Hardy et al. (1981).

4 The Impact of Gerrymandering

4.1 Summary Statistics and Basic Determinants of Incumbent Reelection Rate

Figure 1 displays the reelection rates of incumbents over the last century. The solid line represents the proportion of Representatives who won reelection, conditional on standing again for election and receiving the party nomination in the primaries.[10] The upward trend, especially over the past fifty years, is pronounced. The reelection rate, already quite high in 1950 at 91.82%, was 98.25% in the most recent Congressional elections. Though the incumbent reelection rate in 2004 is not the maximum in the data set, the last decade (and especially the last four Congressional elections) have been, on average, the least hospitable times for challengers in the history of the nation.

It is also interesting to compare the increase in the incumbent reelection rate in Figure 1 to the time series for the average incumbent voteshare in Figure 1A. Though incumbents have become electorally more successful since the 1930s, they have not increased their average vote margin over the same time period. Rather, incumbents have managed to reduce the variance of outcomes. The interval bars in Figure 1A show the 25th and 75th percentiles of the incumbent voteshare distribution in each year, statistics that have shrunk towards the mean over the past 70 years. This finding further reinforces the need to use only the outcome of an election rather than the vote counts to analyze the impact of redistricting on incumbents[11].

This high reelection rate reflects more than merely an artifact of strategic retirement in the face of a tough election challenge. The lower, dotted line in Figure 1 recalculates the reelection probabilities for incumbents under more conservative assumptions: For this series,

[10] In practice, incumbent Representatives are challenged successfully in primaries so infrequently that this limitation is insignificant. This is a greater problem in the pre-civil rights South, where the real elections often occurred not even in the Democratic primaries (since a Democrat would always win) but even in a racially segregated Democratic party booster club.

[11] For the sake of completeness, we do provide basis results using incumbent voteshare as the dependent variable along side Tables 3 and 4. These are tables 3a and 3b. However, our analysis focuses on those results using the reelection variable.

if an incumbent Representative retires before an election and a member of the opposite party ends up filling the seat, then we count the action as though the incumbent had stood for reelection and lost. Though still not accounting for losses in the primaries, this measure should *overestimate* the correction for strategic retirements, and thus provide a lower bound for the "true" reelection rates. This series tracks the first quite closely, though. Other factors must be driving this increase.[12]

Gerrymandering is potentially one of these factors. Unlike other explanations, though, gerrymandering has mostly occurred before election years that follow the decadal census and not before other elections. Table 1 shows the timing of redistrictings since 1970. (Before 1964, many states did not redistrict to adjust for population changes - but when they did so, it occurred with a similar timing. Nearly all states were forced by federal courts to do so in the late 1960s. The standard redistricting cycle as we know it today begin after the census in 1970). While nearly all fifty states redistricted in 1972, 1982, 1992, and 2002, no more than ten redistrictings occurred out of phase in any decade. Furthermore, as Table A2 (in the Appendix) demonstrates, these mid-decade boundary adjustments were often either scheduled off-cycle changes (as in Maine or Montana) or small district-specific adjustments in response to court decisions. We correct for these slight timing anomalies in our specifications.

In order to identify the impact of gerrymandering as precisely as possible, we include a number of control variables that could affect the incumbent reelection rate. Summary statistics for these variables, along with the main dependent variable, appear in Table 2. Since we also run regressions using only our data for 1972-2004, we provide summary statistics for this sub-period as well. Incumbents who run for reelection win just under 92% of the time in the full sample, and more than 95% of elections since 1972. Our first covariate is Real GDP growth, measured in percentage points, for the election year. The economy grew at an average of 2.6% per year in our sample and at the faster rate of 3.05% since 1972. The variability of economic growth is also much lower in the more recent part of the sample

[12] We have also replicated our regression results below using this alternative measure of incumbent defeat; the coefficients are substantively unchanged.

period, since the past 30 years have not seen economic conditions as extreme as those during the Great Depression or World War 2.[13] Indeed there is a substantial literature exploring why this is the case (see, for example, Blanchard and Simon (2001).)

Nearly 7% of incumbents in our sample are freshman, meaning that they have served, at most, one full term prior to standing for reelection. The number of new incumbents increases in the later years of our sample to more than 17%. Exactly one half of the observations in our sample come from midterm years, or those Congressional election years without a presidential election, though slightly fewer of our incumbents stand for reelection in midterm years, relative to presidential years after 1972. Approximately 52% of our incumbents are in the same party as the sitting president, but this number falls to 47% in the last several decades of our sample. Finally, though we do not include this characteristic as a covariate, approximately 56% of incumbents in our sample are Democrats.

Table 3 displays the results of regressions of incumbent reelection outcomes on our set of control variables. Column 1 simply regresses Y_{rst} on a linear time trend (in Congressional elections). The probability that incumbents are reelected to the House of Representatives has, on average, increased by 0.262 percentage points per election over the last 80 years. All coefficients have been multiplied by 100, so that they represent percentage points[14]. Column 2 shows that real economic growth (during the year of the election) is also a powerful predictor of movement over time, as noted by Kramer (1971); an additional 1 percentage point of economic growth increases the reelection rate by 0.221 percentage points. Column 3 adds a number of other variables to the regressions. "Freshman" incumbents are significantly more likely to suffer defeat than more senior incumbents, a crude measure of the more generally positive effect of tenure explored in the literature (i.e., Alford and Hibbing (1981) and Dawes and Bacot (1998)). There is also a pronounced political cycle, as the literature has well established. In non-presidential election years - that is, midterm elections - incumbents in

[13] In other specifications not reported here, we included national economic growth in the year preceding the election, as well as state-specific economic conditions since 1960. Neither variable added much explanatory power or materially affected the coefficients of interest.

[14] The literature has commented on this trend at least since Erikson (1971), though it has focused more on the "incumbency advantage," traditionally defined the additional vote share garnered by an incumbent relative to an otherwise similar non-incumbent.

the party of the president are 11.263 percentage points less likely to be reelected than in presidential election years, while those in the opposition party are 5.579 percentage points more likely to win. The difference in presidential election years in less pronounced. As predicted by Alesina and Rosenthal (1989), economic conditions have less predictive power when controlling for the political cycle. In the later years of our sample, though, economic growth does have an impact on the incumbent reelection rates. Finally, we allow for an additional impact of economic growth when growth is negative.

We do not control for challenger quality in our specifications. Many studies have found this has much predictive power on electoral outcomes, and even that movements in this variable over time have contributed towards the increase in the reelection rate (Cox and Katz (1996), Levitt and Wolfram (1997), Cox and Katz (2002)). These effects from the quality of challengers may not be an alternative explanation, though, but rather a channel through which the effects of gerrymandering impact elections. Thus, we do not include challenger quality as a control, so as to capture the full impact of redistricting.

In the primary specifications below, we use more complicated functions in time rather than a simple linear trend. Column 4 of Table 3 uses a smooth cubic spline to control for shifts over time, and the other coefficients are not substantively different. The same is true in Column 5 with the addition of state-specific dummy variables. Columns 6 and 7 repeat these final two specifications in the "short" window. Economic growth has a much larger impact in these later years, while the political cycle is less pronounced, though still significant.

4.2 Main Results

The primary results in this paper appear in Table 4. The regression in column 1 includes only a linear time trend (in Congressional elections, as above) and a step function for redistricting ("Redistricting Effect"), the simplest test for the impact of gerrymandering. The steps at each redistricting are assumed to be constant in this specification. If incumbent gerrymandering were responsible for the entire increase in reelection rates, then the Redis-

tricting Effect would be significantly positive and the time trend close to zero. The results in Column 1 are just the opposite, though. The time trend, at 0.230, now accounts for nearly all of the increase in the reelection rates (compare to the coefficient of 0.262 in Table 3, Column 1), while the jumps associated with redistricting are not significant. Column 2 allows for the decadal jumps associated with redistricting to vary across decades; the data soundly reject the restriction imposed on it in Column 1. Furthermore, the time trend coefficient, at 0.277, is now greater than in Column 1 in Table 3, and accounts for more than the entire increase in the incumbent reelection probability.

Column 3 includes the covariates from Table 3 and state fixed effects in the regression; the coefficient on the time trend increases significantly to 0.589, while the negative impacts of redistrictings remains statistically less than 0 in three decades and in no period statistically greater than zero. Column 4 replaces the time trend with a three-part smooth cubic spline. To do so, we divide the sample into three equally sized time periods. We then estimate a separate cubic function in time over each period, requiring only that the aggregate function be continuous and that it have a continuous first derivative at both knots. Thus, we estimate a linear term for the entire sample and independent quadratic and cubic terms for each sample, so that our smooth function in time is seven-dimensional. The coefficients measuring the size of the discontinuous jumps associated with redistricting became slightly more negative, on average.

Columns 6 and 7 present the specifications from Columns 3 and 4 in the "short" window, beginning in 1972. Because there are fewer election years in the sample, the smooth cubic spline now includes only a single knot. The results, however, are remarkably similar to those for the "long" period. The time trend or smooth cubic spline still accounts for more than all of increase in the incumbent reelection rates, while the discontinuous jumps associated with redistricting are, on average, negative.

Figure 2 provides a graphical representation of the import of the results from Column 4 in Table 4. The thick dark line represents the actual reelection rate for incumbent Representatives since 1914, taken from Figure 1. The lighter lines represent the predicted probabilities from Column 4, adjusted to begin from the same point in 1914. The upper-

most line plots the smooth cubic spline. It far outpaces the actual reelection probability, suggesting that the many factors which likely changed continuously over time, such as money in politics, confidence of the electorate in politicians, and the quality of representative-to-district matching, account for more than all of the increase in incumbent reelection rates. The lower-most step function represents the impact of redistricting, as captured through discontinuous jumps after the decadal census, which is negative in all decades except the 1950s. The lighter line in the middle is the combination of the smooth cubic spline and the step function, not including state fixed effects or Table 3 covariates. When combined, the great increases in the smooth cubic spline and the large decreases from redistricting balance out and account for 100% of the actual increase in the reelection rate over the past 80 years. But the implication of this breakdown is clear: The direct effect of incumbent gerrymandering, captured by discontinuous jumps after redistrictings, cannot account for the rise in incumbent successes.

Though the point estimates of the effect of redistricting are negative, perhaps more important is the size of effect that we can reject. Columns 5 and 8 reconfigure the redistricting effect to measure the cumulative effect of the discontinuous jumps rather than the marginal impact in each decade. Column 5 shows that we can easily reject an effect in 2000 (relative to that in 1910) greater than zero, and, with 95% confidence, we can reject an effect greater than -5.85. Of course, measuring the relative impact of redistricting over such a long horizon may be less informative than concentrating on the past 30 years. Column 8 displays the aggregate changes in the impact of gerrymandering relative to that in the 1970s, now rejecting an effect greater than -0.892 with 95% confidence. The implication of this breakdown is clear: redistricting cannot explain the increase in the incumbent reelection probability over the past several decades or even the 20th century.

Though we directly control in our regressions for many of the drivers of the time series volatility (such as economic conditions and the political cycle), there are surely other unobservables which affect the incumbent reelection rate. Since the variation in the incidence of redistricting is mostly year-to-year, we cannot control for "year effects" (though we do account for correlation within years). For instance, our step function might reflect

political scandals that randomly occurred in years ending in "2" rather than the true effect of redistricting. In order to test this alternative hypothesis, we perform a Monte Carlo simulation in which we randomly selected years in which the step function jumps. Since there were nine episodes of redistricting since the beginning of sample, we randomly selected 9 Congressional election years between 1916 and 2004.[15] We then estimated our full specification, as in Column 5 of Table 4, including a three-part smooth cubic spline in time and the control variables from Tables 2 and 3. The coefficient of interest in these regressions is the cumulative effect of redistricting; Figure 3 plots this distribution from 1000 Monte Carlo draws. This distribution is roughly symmetric, with a mean and mode slightly greater than zero. The actual cumulative effect of redistricting of -16.241 lies at the 17th percentile of this distribution, as marked in Figure 3 with a dotted vertical line. Thus, our estimated impact of redistricting lies below the vast majority of effects generated randomly. As one might expect, redistricting years alone do not make up the worst years in the past century for incumbents. For instance, the 1974 election (following Watergate and the OPEC Crisis) was very bad for incumbents; if one pretended that the 1970s redistricting occurred just before this election, rather than in 1971, then the cumulative effect of redistricting would instead lie at the 7th percentile of this distribution. Thus, a statistically significant cumulative effect of gerrymandering need not translate into an effect that lies below the 5th or 2.5th percentile of this distribution. But since the years in which actual redistricting took place are not random, we conclude that it is unlikely that other discontinuous effects are driving this result.

4.3 Robustness Check: Functional Forms

One potential concern with the results in Table 4 is that the estimates of the discontinuous jumps associated with redistricting do not measure discrete shifts in the probability of reelection but rather are an artifact of the functional form used to model the smooth function in time. The use of a smooth cubic spline in Columns 4-5 and 7-8 instead of the simpler linear

[15] We cannot identify the impact of a redistricting in the first year of the sample, since the effect would be measured in the regression constant. Since our full sample begins in 1914, the allowable range begins in 1916.

time trend helps to somewhat allay these fears, but we explore other smooth and flexible functional forms in Table 5.

Columns 1 and 2 (and 5 and 6) of Table 5 replicate the results from Columns 3 and 4 (and 6 and 7) in Table 4, for easy reference. Column 3 employs a 7th degree polynomial (so that the degrees of freedom are the same as the smooth cubic spline) to estimate the underlying smooth function in time, while Column 7 uses a 5th degree polynomial for the "short" window. The parameter estimates in both columns generally lie between the estimates from a linear time trend and those from the smooth cubic spline. Columns 4 and 8 also use a cubic spline, though we now allow the first derivative of the function to jump discontinuously at the breakpoints so that it is no longer "smooth." With this yet more flexible functional form, the parameter estimates of the redistricting jumps get further from 0, further suggesting that these coefficients are actually measuring a discrete movement rather than the inability of the smooth function to fit continuous movements in the reelection probability. In Column 8, we estimate the effect of the 2000 round of redistricting as positive but not statistically significant Perhaps gerrymandering was particularly bad in this most recent round. But even if it were, this magnitude of effect is far less than the large negative impact of the 1990 round of redistricting on incumbents (or the impact of redistricting in the 1980s, for that matter), which remains statistically less than zero.

4.4 Robustness Check: Bipartisan vs. Partisan Gerrymandering

One factor for which we have not, as yet, controlled is the variation in priorities with which state governments redistrict, depending on the political circumstances. For instance, if no single party controls all relevant branches of the state government, then a compromise is usually in order. Such a case would generate a "bipartisan" gerrymander and might benefit all incumbents, regardless of party. Many popular writings blame the increase in incumbent reelection probabilities on this particular type of gerrymandering. On the other hand, if one party controls all involved parties of government, then that party may attempt a "partisan" gerrymander, in which that party attempts to oust a number of the opposing

party's incumbents. Such an objective may even lower the probability of reelection for the majority party's incumbents in exchange for increasing the number of seats held by the majority in expectation. It could be that "bipartisan" gerrymandering has increased the advantage to incumbents over time, but a similar increase in the efficacy of "partisan" gerrymandering has offset that increase, on aggregate. It might also be the case that each type of gerrymandering has increased the incumbent reelection rates associated with that mode, but more states are conducting less incumbent-friendly "Partisan" gerrymanderings, creating a negative aggregate effect of redistricting.

Table 6 explores these possibilities. We could only classify the motivations of states in redistrictings since 1970, and so our regressions therefore focus on the "short" window.[16] For easy comparison, Column 1 replicates the results from the main specification in Column 7 of Table 4.

Column 2 of Table 6 includes fixed effects for the different types of redistricting discussed above (the omitted category is "No Redistricting"). This specification allows all states with "bipartisan" gerrymanders to have higher average incumbent reelection rates than other states, for instance, but keeps the decadal jumps constant across all states. Since the mode of redistricting does not change frequently within a state, we do not include state fixed effects in this specification. The coefficient estimates for the decadal jumps are not changed substantively, nor is there any indication of a significant difference in incumbent reelection probabilities across types of redistricting. Column 3 repeats the specification from Column 2, but includes state fixed effects, so that the "Redistricting Type" effects are identified solely from changes in the mode of gerrymandering within a state. The estimated sizes of the discontinuities do not change much, but the results suggest that states with only one "At-Large" Congressional district may be less favorable towards incumbents. Though

[16] One potential objection to this procedure is that we count each new redistricting as equivalent. For instance, a court drew districts for New York in 1992, but the legislature was forced to slightly modify the plan in 1998 by another federal court ruling. Since the bipartisan government accomplished this redrawing itself, for the purposes of Table 6, we count this as New York shifting from "Court Ordered" to "Bipartisan" redistrciting. Such mid-decade court-mandated redistrictings may not provide the same opportunity for gerrymandering as those at the beginning of each decade. To see if this issue affects our results, we reran the regressions in Table 6 eliminating all "minor" mid-decade redistrictings. Our intention was to retain those redistrictings which were simply a belated resolution of the initial decadal process (as in New Jersey in 1984) but remove more minor changes (such as New York in 1998). Results were substantively unchanged.

this is an intuitively appealing effect, since these states have no opportunity to conduct gerrymandering of any kind, the large estimated difference relies on just three states which have moved in or out of this state since 1970 (Nevada, Montana, and South Dakota) and so is not estimated precisely. All other types of redistricting appear equal in average reelection rate, as in Column 2.

Columns 4 and 5 allow for differently sized decadal jumps for partisan, bipartisan, and court-ordered redistrictings. For instance, the coefficient of –0.793 on "Bipartisan Decadal Jump Differentials" can be interpreted that, at the beginning of each decade, the jump associated with redistricting is 0.793 percentage points more negative for states conducting "bipartisan" gerrymanderings, as compared to those whose new districts were imposed by a court. (Since states without redistricting, by definition, have no decadal jumps, the omitted category here is a Court-Ordered redistricting). There is no evidence that the size of the decadal discontinuities varies across modes of gerrymandering in this systematic way.

Columns 6 and 7 allow further variation in the size of the decadal jumps, estimating an independent coefficient for each type of redistricting in each decade. Thus, relative to the average effect of redistrictings in the 1980s (measured by the 1980s fixed effect), and relative to the average effect in bipartisan gerrymanderings (measured by the bipartisan fixed effect), the bipartisan redistricting in the 1980s was 0.318 percentage points more favorable to incumbents. (The omitted category is a Court-Ordered redistricting in a given decade). None of these estimated coefficients here are statistically different from zero. Of course, the standard error bands in these regressions are quite wide, since we are attempting to estimate quite flexible models using somewhat limited data. But despite the low power of these tests, these results offer no evidence that differences in the reelection rates associated with the several modes of redistricting are important explanatory factors for the puzzle at hand. Like the other regressions, Table 6 suggests that we must look elsewhere to explain the general increase in incumbent reelection rates since 1970.

Tables 7 and 8 explore further specifications using our classification system for the motivations behind redistricting. Table 7 focuses on the possibility that an election immediately after redistricting is different for incumbents than later years under the same districting

regime. For instance, one incumbent often must face another incumbent in a new district created by redistricting. Partisan gerrymanders may also cause incumbents to lose in the year of redistricting but face diminished competition thereafter. To distinguish between these one-time effects and longer term changes in the incumbent reelection rate, we include in these regressions a dummy variable for a "Redistricting Year," which is an election immediately after a redistricting.[17] Column 1 of Table 7 shows the main estimates over the full sample from Table 4, for ease of comparison. Column 2 includes a "redistricting year" fixed effect; the estimate is both statistically and economically insignificant. Columns 3 and 4 repeat this procedure over the shorter sample. Though the estimated effect of a redistricting year is larger than before, it remains insignificant at the 5% level. Furthermore, the point estimate is greater than zero, a finding which runs counter to the intuition that reelection rates fall in redistricting years, as parties attempt to oust opposing incumbents, but then increase afterwards; our results suggest that, if anything, just the opposite occurs.

In columns 2 and 4, we constrain the effect of a "redistricting year" to be constant across all types of gerrymandering. One might not expect this to be the case, though; elections immediately following bipartisan gerrymanders might be more favorable to incumbents, while those after a partisan redistricting might be worse for incumbents. Columns 5 and 6 allow the "redistricting year" effect to vary across different types of redistricting, but there are no significant differences. It does not appear that the years immediately following gerrymanderings are significantly different from other years.

Table 8 further investigates the dynamics which might occur around partisan gerrymanders. In particular, such a redistricting will likely have a different effect on the reelection probabilities of politicians in the majority party (which conducts the gerrymandering) than on the hopes of those in the minority party. Column 1 reproduces the results from Column 2 of Table 6, with redistricting type fixed effects, for ease of comparison. (As before, the omitted category throughout this table is "No Redistricting"). Column 2 splits the fixed

[17] In this specification, a "redistricting year" is the election after *any* redistricting, including both the primary decadal process and any mid-decade corrections required by courts. In results not reported in the paper, we have run these regressions with an alternative definition of a "redistricting year" as only the year following the primary decadal redistricting. The results are substantively unchanged.

effect for a partisan redistricting into separate coefficients for the majority and minority party; there is no significant difference between these estimates. Column 3 replicates the results from Column 2, including state fixed effects. To recall, this specification estimates the fixed effects for redistricting types solely from within state changes. As in Table 6, the overall effect of any redistricting (relative to "At-Large districts") on incumbents' reelection chances is much larger in this specification. But there is no significant difference between the effect for the majority and minority party.

Even though there is no average difference between majority and minority success rates under partisan redistricting regimes, an effect may still exist only in the first year after such a gerrymander (after which few minority representatives may remain). Thus, in the remaining columns, we include both a "redistricting year" effect, as in Table 7, in the regression, as well as a dummy variable indicating that a new partisan redistricting, directed against an incumbent's party, has just been instituted where none existed before. We denote this effect the "Against" effect. Note that this dummy variable measures only *new* partisan attempts; thus, the variable would equal 1 for Democrats in Texas in 2004, since the redistricting had been a court-ordered effort in 2002, but it would equal 0 for Democrats in Texas in 2012 if another republican gerrymander is put in place. Though an effect may be present in the latter situation, theory predicts it should be stronger in the former case, and so we wish to concentrate our measure of the effectiveness of partisan gerrymanders as much as possible. Approximately 4% of incumbents who have run for reelection since 1972 have done so under such circumstances.

Columns 4 and 5 include this "Against" effect, as well as a "Redistricting Year" effect. Neither coefficient is significantly different from 0, though the redistricting year effect is nearly so, as in Table 7. Columns 6 and 7 allow the "Against" effect to vary across parties; in both specifications, it appears more negative when Republicans gerrymander against Democrats, but this difference is not statistically significant. This result suggest that, on average, partisan redistricting may not be as effective as popularly thought.

5 Discussion and Conclusion

In this paper, we use a regression discontinuity design to measure the impact of redistricting on the probability that incumbents are reelected. Though many factors contribute to the successes of incumbents, most of these effects change continuously over time. Redistricting, on the other hand, occurs only sporadically, and usually after decadal Census years. Thus, we identify the effect of redistricting as a discontinuous jump when states redraw boundaries, while using a flexible but smooth function in time to control for the many potentially confounding effects.

Our results show that redistricting has actually *reduced* the success rate of incumbents quite steadily over the past century. While the smooth function in time that we estimate increases somewhat faster than the raw time series, the discontinuous jumps from redistricting are usually negative and sometimes significantly so (as shown in Figure 2). These results are robust to the use of a number of different functional forms for the smooth function in time, and actually get stronger when controlling for economic conditions, political cycles, and seniority. Furthermore, there is no evidence that this impact of redistricting can be explained by controlling for the difference between bipartisan, court-imposed, and partisan modes of gerrymandering.

How is this possible? We know that the technology involved in redistricting, as well as professionals' understanding of political demographics, has improved overtime. With ever faster computers and Census TIGERLine files, state legislatures can now draw finer districts than before, and redistricting consultants can give politicians a better idea of which citizens to group together to maximize political advantage. The effect of redistricting on incumbents' reelection chances has not increased over time, though.

One potential explanation of this seeming paradox is bounded rationality. Perhaps those charged with the responsibility of redistricting still do not understand this very complex problem well enough for new technology to have made a major difference. On the other hand, there are huge stakes on the line in each redistricting. The redistricting process in many states produces much rancor among legislators, and many parties seem willing to

go to great lengths to prevent or force through redistrictings. The spectacle in Texas in 2003, including Democrat state representatives fleeing to Oklahoma to prevent a quorum and Congressman DeLay's use of the FAA to bring them back, is only the most recent and colorful of these stunts. Though politicians may not all understand the many nuances of redistricting, it seems that at least some know enough to make a serious difference. Hence, bounded rationality is not a compelling explanation for our findings.

Another, perhaps more appealing explanation, is that the judicial restraints on gerrymandering have increased alongside technological capabilities. Courts have continually updated their practical interpretation of "equal population" for districts; while districts differing by as much as 2% in size passed the test in 1972, districts whose populations differed by as few as 17 people were invalidated by federal courts in 2002. Furthermore, the amendment to the Voting Rights Act, passed in 1982 but first affecting the redistrictings in the 1990s, restrained states even more in their treatment of minorities. It is likely no accident that this decade, the most active for redistricting litigation (as shown in Table 1), was also the least favorable to incumbents since 1972. More recently, though, federal courts have taken a more restrained approach to redistricting, opting, for instance, not to strike down the Pennsylvania partisan redistricting in *Vieth v. Jubelirer*.

So if not gerrymandering, then what accounts for the observed increase in incumbent success at being reelected? Incumbents might have more access to the professional class of political operatives and campaign knowledge, decreasing the chance that a challenger could force her way into office. The change in the role of money - both legal and illegal - in politics over the past decades may have affected the fortunes of incumbents, as might have the increasing 24-hour coverage of political events in Washington, D.C., which provides free exposure for incumbents. On the other hand, Congressmen may simply be more suited to their jobs now than before, in which case citizens could be more satisfied with their Representatives. More work needs to be done to determine which factors have caused the rising incumbent premium - and to address the key question of whether it is a good or a bad thing.

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Figure 1: Incumbent Reelection Rates

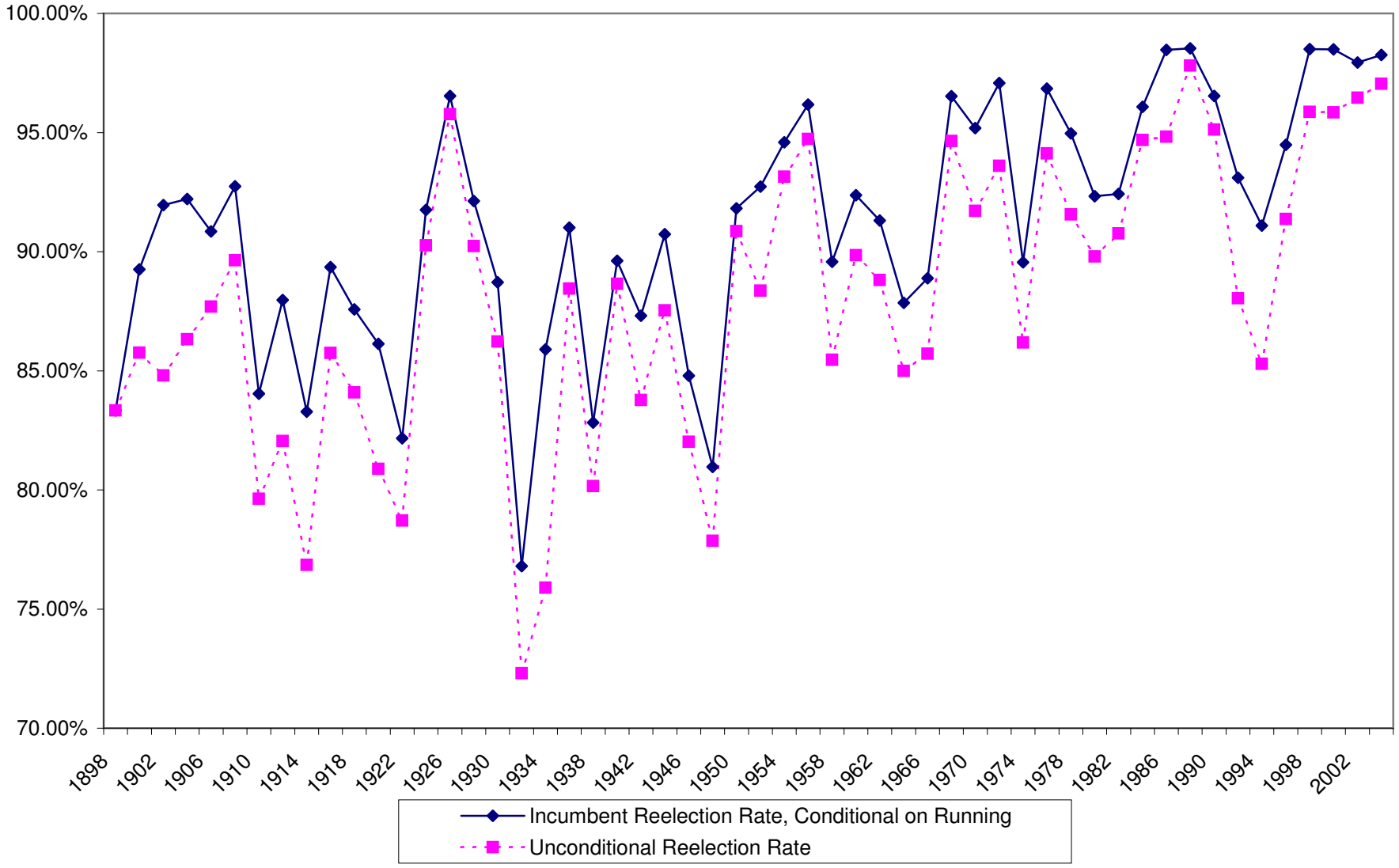

Figure 1A: Incumbent Two-Party Voteshare

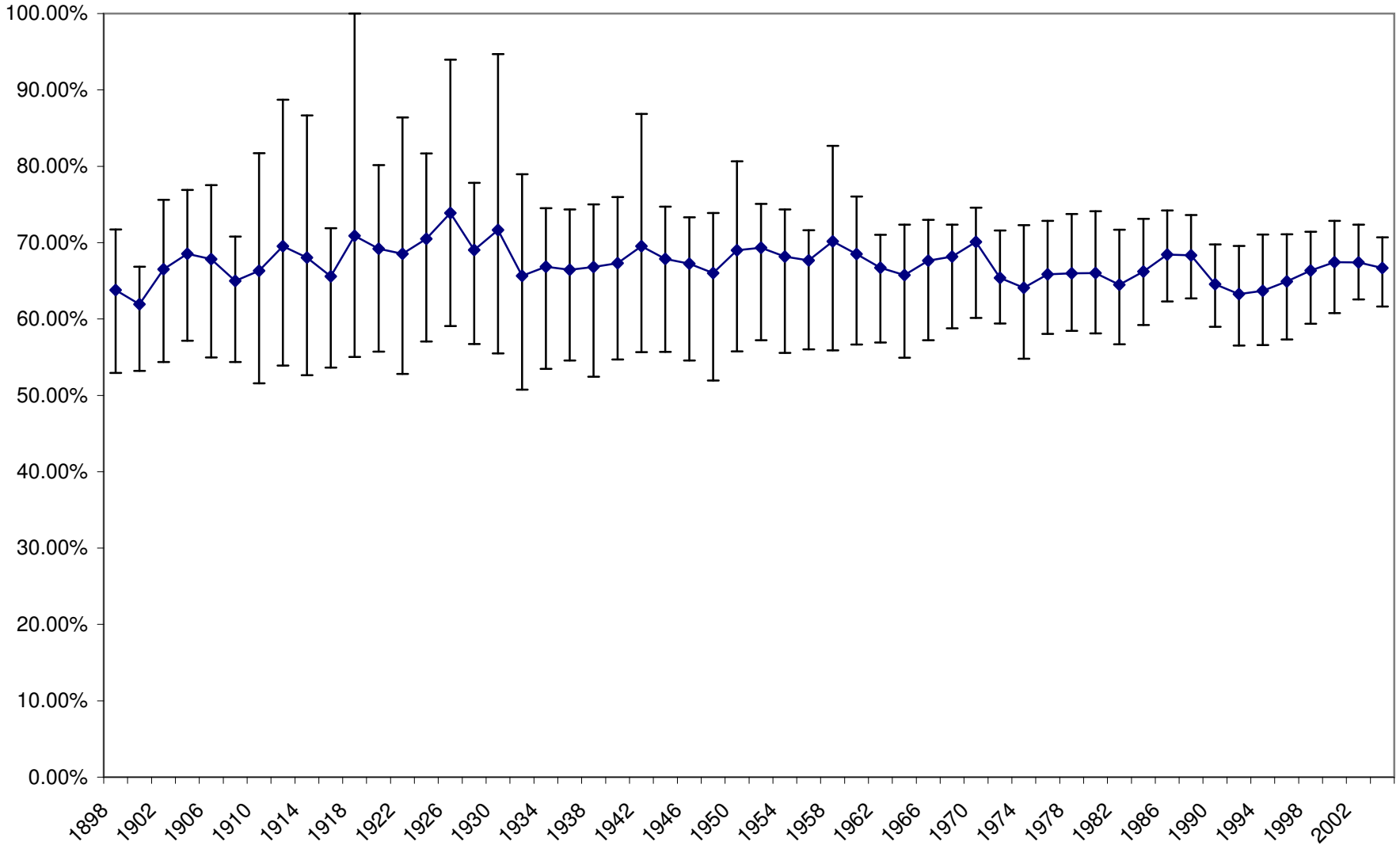

Figure 2: Predicted Incumbent Reelection Rates

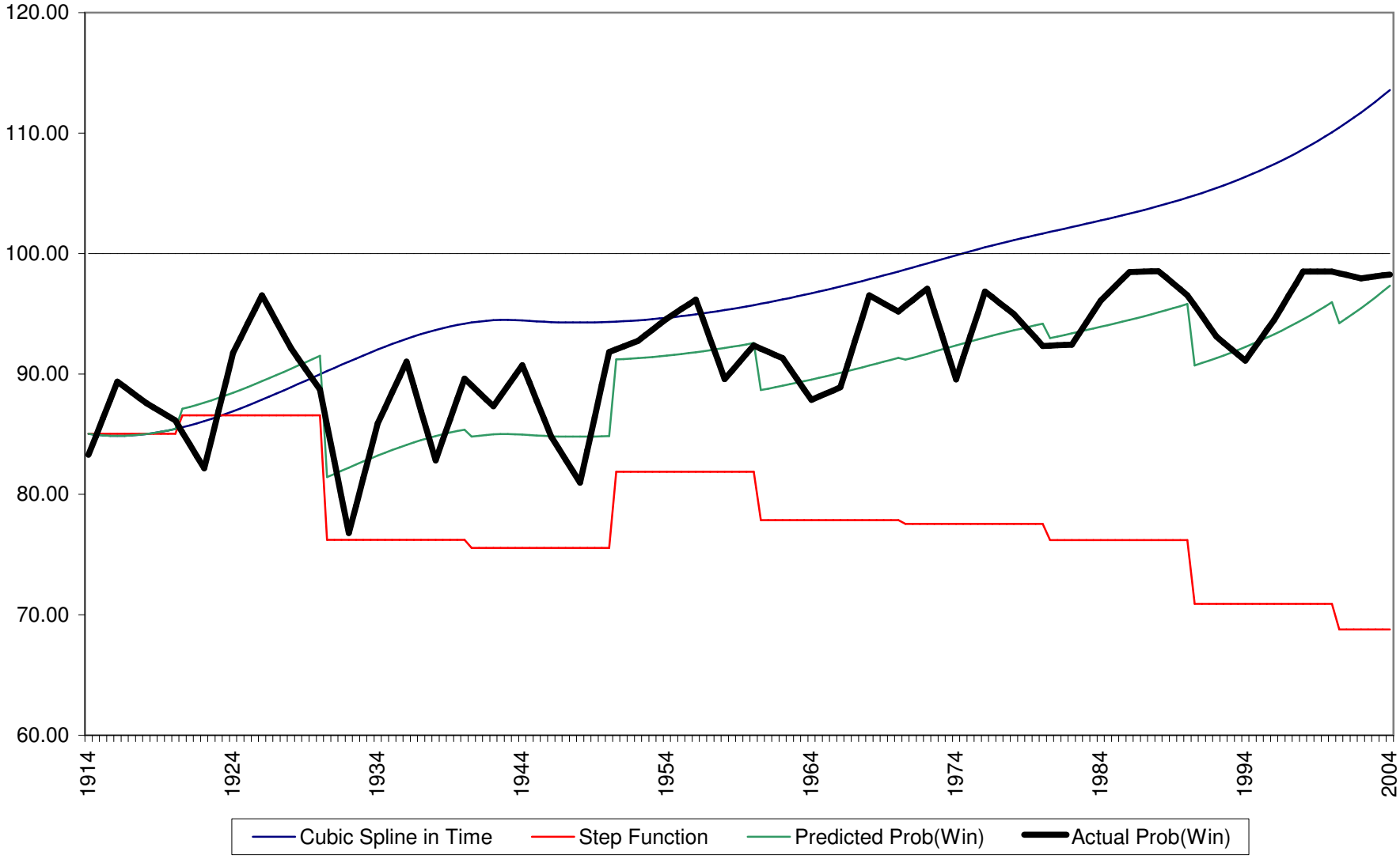

Figure 3: Monte Carlo Distribution of Random "Gerrymandering" Effects

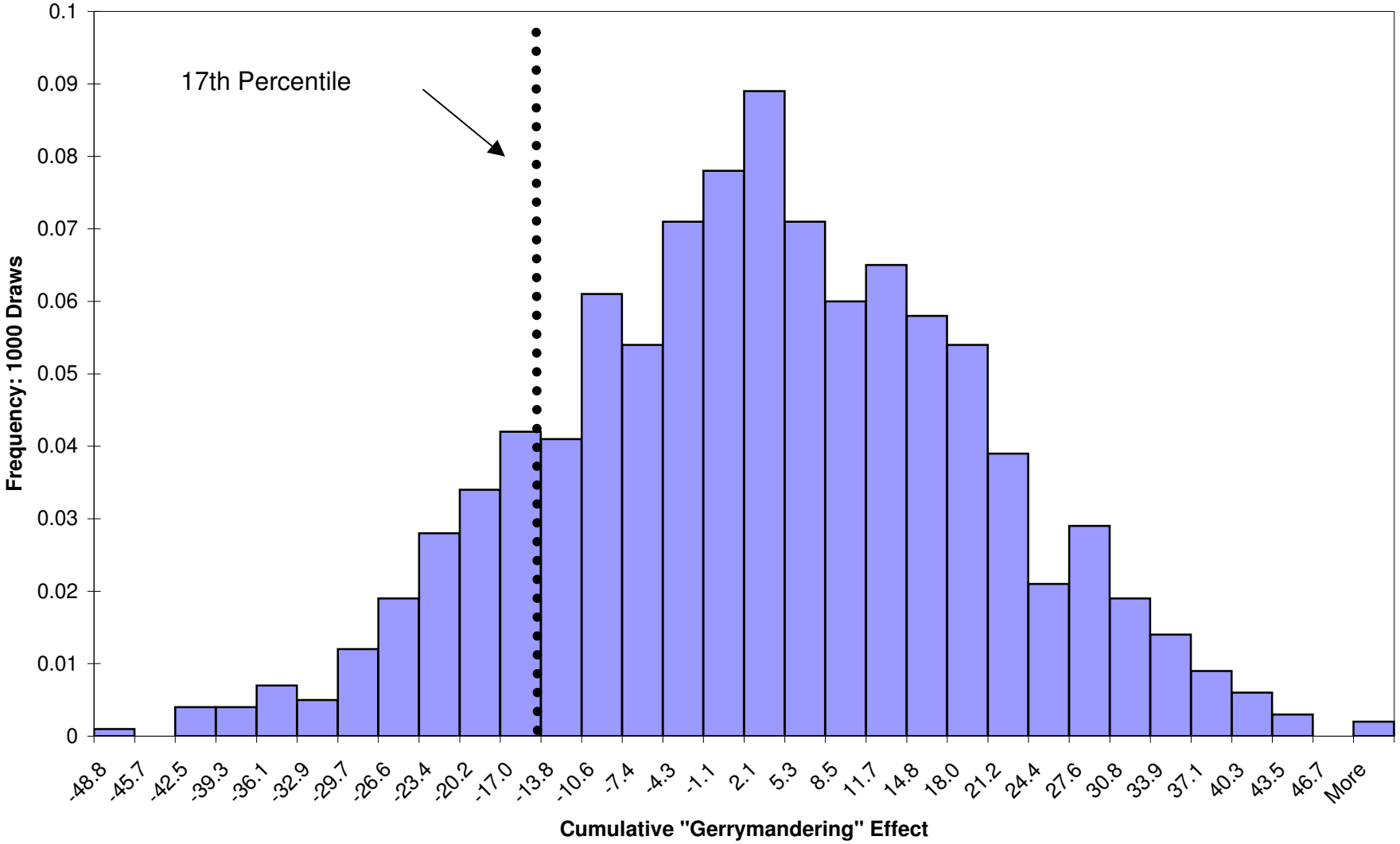

Table 1: Redistrictings Since 1970

Time Period	Bipartisan	Court Imposed	Partisan Democrat	Partisan Republican	No Redistricting
1972	17	8	10	8	6
Other 1970's	2	1	1	0	0
1982	11	11	13	7	6
Other 1980's	2	2	3	1	0
1992	15	13	12	2	7
Other 1990's	4	6	0	0	0
2002	19	4	13	6	7
Other 2000's	1	0	0	2	0
Total	71	45	52	26	26

Data compiled by the authors from www.fairvote.com, contemporary articles from LexisNexis, and Hardy et al. (1981). See Table A1 for details on this classification proceedure.

Table 2: Summary Statistics

Period: 1914 - 2004		
	Mean	Std Dev
Incumbent Wins	0.918	0.275
Real GDP Growth	2.601	5.949
Freshman?	0.068	0.252
Party in Power?	0.523	0.499
Midterm?	0.500	0.500
*Midterm * In Power*	0.279	0.448
Incumbent is Democrat?	0.557	0.497
N	17143	

Period: 1972 - 2004		
	Mean	Std Dev
Incumbent Wins	0.956	0.205
Real GDP Growth	3.049	2.252
Freshman?	0.177	0.382
Party in Power?	0.468	0.499
Midterm?	0.471	0.499
*Midterm * In Power*	0.230	0.421
Incumbent is Democrat?	0.567	0.496
N	6601	

The incumbent data come from Gelman and King (1994) (ICPSR Study #6311) and, for more recent years, from Gary Jacobson. The national growth data are from Alesina and Rosenthal (1995) and the Economic Report of the President (2005).

Table 3: Basic Determinants of Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)						
	Period: 1914-2004					*Period: 1972-2004*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Time Trend	0.262**	0.254**	0.230**				
	(0.040)	(0.037)	(0.033)				
Growth		0.221**	0.04	0.184	0.181	0.615*	0.614*
		(0.093)	(0.119)	(0.149)	(0.150)	(0.267)	(0.268)
Growth < 0			0.355	0.116	0.118	0.585	0.589
			(0.225)	(0.282)	(0.282)	(0.679)	(0.679)
Freshman?			-2.854**	-3.167**	-3.041**	-3.424**	-3.224**
			(1.270)	(1.202)	(1.286)	(1.115)	(1.072)
Party In Power?			1.474	1.533	1.324	-0.683	-0.651
			(2.882)	(2.864)	(2.855)	(1.316)	(1.309)
Midterm Election?			5.579**	5.684**	5.216**	3.572*	3.522*
			(1.824)	(1.731)	(1.656)	(1.259)	(1.227)
*In Power * Midterm*			-11.263**	-11.252**	-10.435**	-6.500*	-6.426*
			(3.374)	(3.349)	(3.288)	(3.018)	(2.977)
Smooth Cubic Spline?	*No*	*No*	*No*	*Yes*	*Yes*	Yes	Yes
State Fixed Effects?	*No*	*No*	*No*	*No*	*Yes*	*No*	*Yes*
N	17143	17143	17143	17143	17143	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995) and the Economic Report of the President (2005). The "Smooth Cubic Spline" has two evenly spaced breakpoints (one breakpoint for the shorter period) and is continuous with a continuous first derivative. "Party in Power?" equals one if a member of the incumbent's party is President at the time of the election.

Table 3A: Basic Determinants of Incumbent Voteshare

	Dependent Variable: Incumbent Two-Party Voteshare						
	Period: 1914-2004					*Period: 1972-2004*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Time Trend	-0.085**	-0.086**	-0.077**				
	(0.023)	-0.023	(0.024)				
Growth		0.012	-0.040	0.016	0.027	0.067	0.069
		(0.045)	(0.069)	(0.077)	(0.065)	(0.104)	(0.105)
Growth < 0			0.128	0.048	0.028	1.141**	1.118**
			(0.093)	(0.108)	(0.097)	(0.368)	(0.369)
Freshman?			-3.753**	-3.571**	-3.813**	-3.473**	-3.215**
			(0.579)	(0.596)	(0.677)	(0.597)	(0.524)
Party In Power?			1.956	1.981	1.037	-0.240	-0.190
			(2.403)	(2.413)	(1.594)	(1.328)	(1.267)
Midterm Election?			4.083*	4.200*	3.414**	2.386	2.381
			2.023	(1.960)	(1.188)	(1.284)	(1.267)
*In Power * Midterm*			-5.968	-5.946	-4.525*	-4.262	-4.213
			(3.518)	(3.531)	(2.156)	(2.418)	(2.370)
Smooth Cubic Spline?	*No*	*No*	*No*	*Yes*	*Yes*	Yes	Yes
State Fixed Effects?	*No*	*No*	*No*	*No*	*Yes*	*No*	*Yes*
N	15891	15891	15891	15891	15891	5563	5563

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995) and the Economic Report of the President (2005). The "Smooth Cubic Spline" has two evenly spaced breakpoints (one breakpoint for the shorter period) and is continuous with a continuous first derivative. "Party in Power?" equals one if a member of the incumbent's party is President at the time of the election.

Table 4: Gerrymandering and Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)							
	Period: 1914-2004					*Period: 1972-2004*		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time Trend	0.230**	0.277**	0.589**			0.741*		
	(0.085)	(0.091)	(0.122)			(0.297)		
Redistricting Effect	0.160							
	(0.334)							
Redistricting: 1920s		3.540	1.749	1.537	1.537			
		(2.271)	(1.929)	(3.556)	(3.556)			
1930s		-6.330*	-8.662**	-10.339**	-8.803			
		(2.976)	(1.937)	(2.972)	(5.510)			
1940s		0.393	-2.173	-0.675	-9.478			
		(2.745)	(2.046)	(3.330)	(5.288)			
1950s		4.524*	4.507	6.335	-3.143			
		(2.221)	(3.111)	(3.992)	(5.759)			
1960s		-2.600	-4.780*	-4.021	-7.164			
		(1.752)	(2.058)	(3.105)	(5.357)			
1970s		0.649	-0.040	-0.321	-7.485	(omitted)	(omitted)	(omitted)
		(2.034)	(1.957)	(3.527)	(5.239)			
1980s		1.029	-1.401	-1.343	-8.829	-1.911	-0.647	-0.647
		(1.550)	(1.276)	(1.832)	(4.924)	(1.651)	(2.672)	(2.672)
1990s		-2.691	-3.999**	-5.289**	-14.118**	-5.242**	-7.826**	-8.473*
		(1.545)	(1.203)	(1.822)	(4.863)	(1.656)	(2.288)	(3.952)
2000s		1.897	0.870	-2.124	-16.241**	0.862	0.881	-7.592*
		(1.269)	(1.084)	(2.059)	(5.213)	(1.698)	(2.487)	(3.350)
Smooth Cubic Spline?	*No*	*No*	*No*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Table 3 Controls?	*No*	*No*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*No*	*No*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
N	17092	17092	17092	17092	17092	6601	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995) and the Economic Report of the President (2005). The "Smooth Cubic Spline" has two evenly spaced breakpoints (one breakpoint for the shorter period) and is continuous with a continuous first derivative. "Table 2 Controls" include all non-time explanatory variables from Table 2, including economic growth, freshman indicators, and political cycle variables. "Redistricting Effect" measures the discontinuous jump in the probability that an incumbant wins reelection each time a state redistricts. The single effect in the second row imposes that the jump each decade is constant. This assumption is relaxed in the coefficient estimates below. Columns 5 and 8 measure the aggregate impact of redistricting in all previous decades rather the marginal effect for a particular decade. For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Table 4A: Gerrymandering and Incumbent Voteshare

	Dependent Variable: Incumbent Two-Party Voteshare							
	Period: 1914-2004					*Period: 1972-2004*		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Time Trend	-0.122	-0.067	0.180**			0.343*		
	(0.044)	(0.044)	(0.049)			(0.044)		
Redistricting Effect	0.186							
	(0.179)							
Redistricting: 1920s		3.413*	1.478	0.055339	0.055339			
		1.279844	(1.057)	1.296333	1.296333			
1930s		-3.794**	-4.806**	-3.906**	-3.851*			
		0.953872	(0.855)	1.149654	1.603996			
1940s		1.652*	-0.295	2.415*	-1.436216			
		0.630375	(0.524)	0.968609	1.588925			
1950s		1.116795	0.493	1.36463	-0.071586			
		0.727986	0.815	1.063102	1.655962			
1960s		-0.77457	-2.035**	-2.918**	-2.989361			
		0.759975	(0.644)	0.811392	1.747738			
1970s		-1.901*	-0.864	-2.17491	-5.164*	(omitted)	(omitted)	(omitted)
		0.802185	(0.668)	1.46027	1.961345			
1980s		1.30329	-0.799	-0.249685	-5.414**	-1.043	0.465	0.465
		0.833766	(0.869)	1.312045	1.662283	(0.923)	(1.025)	(1.025)
1990s		-0.950061	-2.574*	-2.809845	-8.224**	-2.919*	-2.358	-1.893
		1.0692	(1.134)	2.453101	2.597316	(1.412)	(2.328)	(2.328)
2000s		2.124*	1.039	-1.987802	-10.212**	0.544	-2.358	-2.358
		0.821993	0.626	1.545812	2.273886	(0.898)	(1.937)	(1.937)
Smooth Cubic Spline?	*No*	*No*	*No*	*Yes*	*Yes*	*No*	*Yes*	*Yes*
Table 3 Controls?	*No*	*No*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*No*	*No*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
N	15891	15891	15891	15891	15891	5563	5563	5563

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995) and the Economic Report of the President (2005). The "Smooth Cubic Spline" has two evenly spaced breakpoints (one breakpoint for the shorter period) and is continuous with a continuous first derivative. "Table 2 Controls" include all non-time explanatory variables from Table 2, including economic growth, freshman indicators, and political cycle variables. "Redistricting Effect" measures the discontinuous jump in the probability that an incumbant wins reelection each time a state redistricts. The single effect in the second row imposes that the jump each decade is constant. This assumption is relaxed in the coefficient estimates below. Columns 5 and 8 measure the aggregate impact of redistricting in all previous decades rather the marginal effect for a particular decade. For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Table 5: Gerrymandering and Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)							
	Period: 1914-2004				*Period: 1972-2004*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Smooth Time Function:	*Time Trend*	*Smooth Cubic Spline*	*7th Degree Polynomial*	*Cubic Spline*	*Time Trend*	*Smooth Cubic Spline*	*5th Degree Polynomial*	*Cubic Spline*
Redistricting: 1920s	1.749	1.537	0.159	1.894				
	(1.929)	(3.556)	(4.188)	(4.138)				
1930s	-8.662**	-10.339**	-9.792**	-10.275**				
	(1.937)	(2.972)	(2.875)	(2.940)				
1940s	-2.173	-0.675	0.156	-2.203				
	(2.046)	(3.330)	(3.171)	(4.662)				
1950s	4.507	6.335	6.018	8.024				
	(3.111)	(3.992)	(3.829)	(4.791)				
1960s	-4.780*	-4.021	-4.396	-3.732				
	(2.058)	(3.105)	(2.843)	(3.053)				
1970s	-0.040	-0.321	0.052	-2.972	*(omitted)*	*(omitted)*	*(omitted)*	*(omitted)*
	(1.957)	(3.527)	(2.829)	(3.824)				
1980s	-1.401	-1.343	-1.239	-0.202	-1.911	-0.647	-0.984	-3.512
	(1.276)	(1.832)	(1.928)	(1.952)	(1.651)	(2.672)	(2.563)	(2.502)
1990s	-3.999**	-5.289**	-5.974**	-5.946**	-5.242**	-7.826**	-6.600**	-7.198**
	(1.203)	(1.822)	(1.873)	(1.944)	(1.656)	(2.288)	(2.049)	(1.813)
2000s	0.870	-2.124	-0.777	-1.181	0.862	0.881	0.731	2.667
	(1.084)	(2.059)	(1.972)	(1.891)	(1.698)	(2.487)	(1.925)	(1.883)
Table 3 Controls?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
N	17092	17092	17092	17092	6601	6601	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995) and the Economic Report of the President (2005). "Table 2 Controls" include all non-time explanatory variables from Table 2, including economic growth, freshman indicators, and political cycle variables. "Redistricting" measures the discontinuous jump in the probability that an incumbant wins reelection for the redistrictings in each decade. This table varies the continuous function in time: Columns 1 and 5 employ a linear time trend, and Columns 2 and 5 use a three-piece cubic spline whose first derivative in continuous, as in Table 3, Columns 3 through 6. Columns 3 and 7 use a seventh-degree polynomial, while Columns 4 and 8 allow the first derivative of the three-part cubic spline to be discontinuous. For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Table 6: Gerrymandering Types and Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Redistricting: 1980s	-0.647	-1.219	-1.909	-0.990	-1.983	-0.782	-1.674
	(2.672)	(2.454)	(2.615)	(2.729)	(2.795)	(2.925)	(2.924)
1990s	-7.826**	-7.595**	-8.087**	-7.656**	-8.127**	-7.625**	-8.135**
	(2.288)	(2.111)	(2.364)	(2.249)	(2.289)	(2.078)	(2.041)
2000s	0.881	1.224	0.608	1.765	0.484	-3.230	-3.461
	(2.487)	(2.430)	(2.517)	(2.567)	(2.411)	(3.980)	(3.902)
Redistricting Type Fixed Effects:							
Bipartisan		2.775	12.607	3.704	12.278	3.773	12.045
		(2.876)	(6.079)	(2.832)	(5.815)	(2.845)	(5.842)
Court Imposed		3.695	12.253*	3.715	12.432	3.653	11.895
		(3.073)	(5.748)	(3.418)	(6.031)	(3.482)	(6.060)
Partisan		3.778	13.048*	4.204	13.424*	4.635	13.543*
		(2.803)	(6.009)	(2.739)	(5.833)	(2.835)	(6.008)
Decadal Jump Differentials:							
Bipartisan				-0.512	0.402		
				(0.982)	(0.882)		
Partisan				-0.627	-0.166		
				(0.914)	(0.933)		
Redistricting Interactions:							
*1980s * Bipartisan*						0.294	1.557
						(1.528)	(2.045)
Partisan						-1.717	-1.584
						(1.600)	(1.644)
*1990s * Bipartisan*						-2.956	-2.263
						(1.996)	(2.521)
Partisan						1.573	2.166
						(1.482)	(1.579)
*2000s * Bipartisan*						6.487	5.939
						(3.860)	(4.384)
Partisan						1.709	1.450
						(4.236)	(4.456)
Smooth Cubic Spline?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Control Variables?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*
N	6601	6601	6601	6601	6601	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995). Redistricting data compiled by the authors from www.fairvote.com, articles from LexisNexis, and Reapportionment Politics, ed. Hardy, Heslop, and Anderson (1981). All regressions include a two-part smooth cubic spline. The omitted decade is the 1970s; the omitted redistricting type is "No Redistricting." For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Table 7: Gerrymandering Year Effects and Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)					
	Period: 1914-2004		*Period: 1972-2004*			
	(1)	(2)	(3)	(4)	(5)	(6)
Redistricting: 1920s	1.537	1.596				
	(3.556)	(3.591)				
1930s	-10.339**	-10.276**				
	(2.972)	(2.961)				
1940s	-0.675	-0.667				
	(3.330)	(3.344)				
1950s	6.335	6.493				
	(3.992)	(3.995)				
1960s	-4.021	-3.906				
	(3.105)	(3.047)				
1970s	-0.321	-0.676	*(omitted)*	*(omitted)*	*(omitted)*	*(omitted)*
	(3.527)	(3.415)				
1980s	-1.343	-1.634	-0.647	-0.410	-1.099	-1.927
	(1.832)	(1.857)	(2.672)	(2.611)	(2.431)	(2.523)
1990s	-5.289**	-5.642**	-7.826**	-8.379**	-8.336**	-8.436**
	(1.822)	(2.019)	(2.288)	(1.826)	(1.860)	(1.896)
2000s	-2.124	-2.673	0.881	-1.719	-1.405	-2.245
	(2.059)	(2.236)	(2.487)	(2.547)	(2.798)	(2.553)
Redistricting Year Fixed Effect		0.522		1.735		
		(1.123)		(0.960)		
Redistricting Type Redistricting Year*						
Bipartisan					1.749	1.985
					(1.861)	(1.609)
Court Imposed					1.565	1.704
					(1.148)	(1.030)
Partisan					1.568	1.770
					(1.094)	(0.973)
Smooth Cubic Spline?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Control Variables?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*Yes*	*Yes*	*Yes*	*Yes*	*No*	*Yes*
Redistricting Type FE?	*No*	*No*	*No*	*No*	*Yes*	*Yes*
N	17143	17143	6601	6601	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995). Redistricting data compiled by the authors from www.fairvote.com, articles from LexisNexis, and Reapportionment Politics, ed. Hardy, Heslop, and Anderson (1981). All regressions include a two-part smooth cubic spline. The regressions with Regression Type*Redistricting Year fixed effects include the basic Redistricting Type fixed effects, which are omitted for ease of interpretation. For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Table 8: Partisan Gerrymandering and Incumbent Reelection Rates

	Dependent Variable: Prob(Incumbent Reelection)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Redistricting: 1980s	-1.219	-1.224	-2.001	-1.068	-1.885	-1.184	-2.051
	(2.454)	(2.448)	(2.525)	(2.416)	(2.532)	(2.422)	(2.548)
1990s	-7.595**	-7.608**	-7.612**	-8.362**	-8.461**	-8.357**	-8.467**
	(2.111)	(2.116)	(2.149)	(1.865)	(1.899)	(1.844)	(1.883)
2000s	1.224	1.230	0.732	-1.326	-2.165	-1.439	-2.264
	(2.430)	(2.430)	(2.404)	(2.729)	(2.482)	(2.567)	(2.354)
Redistricting Type Fixed Effects:							
Bipartisan	2.775	2.782	12.318	2.798	12.744	2.903	12.842
	(2.876)	(2.875)	(6.247)	(2.883)	(6.419)	(2.847)	(6.363)
Court Imposed	3.695	3.703	12.319	3.711	12.699	3.810	12.826*
	(3.073)	(3.074)	(5.868)	(3.071)	(6.063)	(3.038)	(5.999)
Partisan	3.778			3.861	14.116*	3.925	14.186*
	(2.803)			(2.866)	(6.242)	(2.834)	(6.193)
Partisan Redistricting For		3.919	13.764*				
		(2.820)	(6.046)				
Partisan Redistricting Against		3.582	13.498*				
		(2.897)	(6.130)				
Redistricting Year Effect				1.704	1.870	1.689	1.855
				(1.115)	(0.914)	(1.094)	(0.902)
"Against" Effect				-0.649	-0.428		
				(1.440)	(1.353)		
"Against" Effect, Republican						0.993	1.199
						(2.011)	(2.159)
"Against" Effect, Democrat						-4.070	-3.788
						(2.633)	(3.032)
Smooth Cubic Spline?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Control Variables?	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State Fixed Effects?	*No*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*
N	6601	6601	6601	6601	6601	6601	6601

All Standard Errors are clustered by year. * and ** denote statistical significance at the 5% and 1% level, respectively. Election data are from ICPSR Study #6311 (Gelman and King) and Gary Jacobson. Growth data are taken from Alesina and Rosenthal (1995). Redistricting data compiled by the authors from www.fairvote.com, articles from LexisNexis, and Reapportionment Politics, ed. Hardy, Heslop, and Anderson (1981). All regressions include a two-part smooth cubic spline. The omitted decade is the 1970s; the omitted redistricting type is "No Redistricting." The "Against" effect represents elections in a redistricting year in which there has been a partisan redistricting against that particular incumbent. The "Against Effect," when broken out by party, denotes the party against whom districts were gerrymandered. For ease of interpretation, the dependent variable has been multiplied by 100, and so a coefficient of 3, for instance, would indicate a 3 percentage point effect.

Appendix

Table A1: Gerrymandering Classifications

State	Year			
	1972	1982	1992	2002
Alabama	PD	PD	CI	PD
Alaska	ND	ND	ND	ND
Arizona	PR	PR	CI	BP
Arkansas	BP	BP	PD	BP
California	PD*	CI*	CI	PD
Colorado	PR	CI	BP	CI
Connecticut	BP	PD	BP	BP
Delaware	ND	ND	ND	ND
Florida	BP	PD	CI*	PR
Georgia	BP	PD	CI*	PD
Hawaii	-	CI	PD	PD
Idaho	BP	BP	BP	PR
Illinois	BP	CI	CI	BP
Indiana	PR	PR	BP	PD
Iowa	CI	BP	BP	BP
Kansas	CI	CI	BP	PR
Kentucky	BP	PD	CI	BP
Louisiana	PD	BP*	CI*	BP
Maine	BP	-	-	-
Maryland	PD	PD	PD	PD
Massachusetts	PD	PD	BP	PD
Michigan	CI	CI	CI	PR
Minnesota	CI	CI	CI*	CI
Mississippi	CI	CI*	PD	CI
Missouri	CI	CI	CI	BP
Montana	CI	-	ND	ND
Nebraska	PR	PR	BP	BP
Nevada	ND	PR	PD	BP
New Hampshire	PR	BP	PR	BP
New Jersey	BP	PD*	BP	BP
New Mexico	BP	PD	PD	CI
New York	BP*	BP	CI*	BP
North Carolina	BP	PD	BP*	PD
North Dakota	ND	ND	ND	ND
Ohio	PD	BP	BP	BP
Oklahoma	PR	PD	BP	PD
Oregon	BP	BP	PD	PD
Pennsylvania	BP	PR	BP	PR*
Rhode Island	PD	PD	PD	PD
South Carolina	PD	CI	BP*	BP
South Dakota	BP	ND	ND	ND
Tennessee	BP*	PD	PD	PD
Texas	BP	CI*	PD*	BP*
Utah	PR	PR	PR	PR
Vermont	ND	ND	ND	ND
Virginia	BP	BP	PD*	BP
Washington	CI	PR*	BP	BP
West Virginia	BP	BP	PD	PD
Wisconsin	BP	BP	CI	BP
Wyoming	ND	ND	ND	ND

- denotes that the primary decadal redicstricting occurred off-cycle.

* denotes that redistricting also occurred later in the decade. See Table A2 for details.

Notes: BP = Bipartisan, CI = Court Imposed, ND = No Redistricting (Single District), PR = Partisan Republican, PD = Partisan Democrat. These data were compiled from the redistricting resource at www.fairvote.com, various contemporary news sources, and Hardy et al. (1981). We classify a redistricting as "Partisan" if and only if a party controls all relevant branches of the state government and passes a redistricting plan without the support of the opposition. We classify a redistricting as "Court Imposed" if and only if a federal or state court made the final determination of the redistricting plan.

Table A2: Off-Cycle Redistrictings

State	Year	Type	Special Cicumstances
California	1974	CI	After reluctantly imposing the Democratic legislature's plan on the state over Gov. Reagan's veto in 1972, the state Supreme Court independently drew its own plan, which was put into place before the 1974 elections.
New York	1974	BP	Federal courts ordered the legislature to redistrict New York City so as to encourage minority representation (per the VRA) and as compensation for the past practice of printing ballots in English only.
Hawaii	1976	PD	Hawaii redistricted first in 1976 after its admission as a state in 1959.
California	1984	PD	Federal courts struck down the redistricting plan in 1982. By 1984, the state
Louisiana	1984	BP	Federal courts struck down the 1982 redistricting and ordered the bipartisan state government to create a black-majority district, which it did.
Maine	1984	PD	Maine, by state law, redistricts two years later than most states.
Mississippi	1984	CI	In the first application of the VRA, the Supreme Court struck down the 1982 redistricting and federal courts created a majority-black district.
Montana	1984	BP	Montana redistricted late because of availability of Census data.
New Jersey	1984	CI	Federal courts struck down the plan drawn by the New Jersey Special
Texas	1984	PD	Federal courts drew temporary districts for the 1982 election after a pro-tracted court fight left no time for the legislative process. The overwhelmingly Democratic Texas legislature redrew acceptable boundaries in 1983.
Washington	1984	PR	A federal court ruled that Washington's Congressional districts had unjustified deviations from population equality. The state government then redrew the boundaries to correct the problem.
Maine	1994	CI	Maine, by state law, redistricts two years later than most states.
Minnesota	1994	CI	In 1992, the state courts implemented a plan that had also been litigated and
South Carolina	1994	BP	The state legislature slightly adjusted the 6th Congressional district after federal courts declared it an unconstitutional racial gerrymander in 1993.
Florida	1996	CI	Following *Shaw*, the state supreme court ruled in 1996 that the 3rd District was an unconstitutional "racial gerrymander." The court suggested a way in which
Georgia	1996	CI	In *Miller v. Johnson* (1995), the Supreme Court declared the 2nd and 11th districts to be racial gerrymanders. Courts fixed the problem.
Texas	1996	CI	After federal courts struck down the 1992 redistricting plan in the summer of 1996, they voided primary results in 13 of 30 districts and ruled that special
Louisiana	1996	CI	Federal courts struck down the 1992 plan as an unconstitutional racial gerrymander, due to a black-majority district stretching the legnth of the state. Federal courts struck down a revised plan from the state legislature in 1994 and imposed its own plan in time for the 1996 elections.
New York	1998	BP	The plan enacted by state courts in 1992 was struck down in 1996 by federal courts as not narrowly tailored to satisfy Sections 2 and 5 of the VRA. The state legislature enacted a new plan in 1997.
North Carolina	1998	BP	A series of court rulings (including *Shaw*) declared the infamous 12th district to be not narrowly tailored to satisfy the VRA as a compelling state interest. The state legislature redrew the district in 1997.
Virginia	1998	BP	The state legislature redrew the 3rd district in 1997 after it was declared an unconstitutional racial gerrymander.
Maine	2004	BP	Maine, by state law, redistricts two years later than most states.
Pennsylvania	2004	PR	} Non-court ordered and partisan off-cycle redistricting in PA and TX in 2004
Texas	2004	PR	} breaks the traditional (though not explicit) prohibition on such practices.