The Party or the Purse?
Unequal Representation in the U.S. Senate

Jeffrey Lax*
Department of Political Science
Columbia University
JRL2124@columbia.edu

Justin Phillips
Department of Political Science
Columbia University
JHP2121@columbia.edu

Adam Zelizer
Department of Political Science
Columbia University
APZ2002@columbia.edu

420 West 118th St.
NY, NY 10027

April 24, 2018

Abstract
Recent work on U.S. policymaking argues that responsiveness to public opinion is distorted by money, in that the preferences of the rich matter much more than those of lower-income Americans. This work however tends to ignore or downplay partisan responsiveness, the extra weight elected representatives might give to co-partisan constituents, another potential distortion of representation. We disentangle the conflicting pressures faced by senators using 50 roll-call votes from eight recent legislative sessions. In this context, we find that claims of economic elite domination are overstated—instead, party trumps the purse when senators have to take sides. The rich do get what they want more often than the poor, but only from Republican senators, and only when Republican constituents want it. Even that narrow rich advantage disappears when it conflicts with the party line, the stance of a senator’s partisan colleagues. Thus, partisan responsiveness enacts, shapes, and constrains income asymmetries.

*Corresponding author. This project was funded in part by a grant from the Russell Sage Foundation.
1 Introduction

The new conventional wisdom is that American democracy provides disproportionate political representation to the wealthy. A highly visible and growing body of expert political science research concludes that government policy is far more responsive to the preferences of the affluent than to those of either the middle class or the poor, distorting “normal” representation (Bartels 2008; Gilens 2005, 2012; Rigby and Wright 2011; Gilens and Page 2014; Ellis 2012; Hayes 2013; Tausanovitch 2016). Gilens (2012, 1), for example, concludes that, “under most circumstances, the preferences of the vast majority of Americans appear to have essentially no impact on which policies the government does or doesn’t adopt.” Such class-based political inequality violates norms of equal voice and, worse still, raises the spectre of a vicious cycle in which low-income individuals are locked out of power such that economic inequality begets further political inequality which begets still more economic inequality. This is the troubling diagnosis of the “economic elite domination model” (Gilens and Page 2014), or EEDM.

Claims of unequal responsiveness, however, have not gone unchallenged. Some studies find evidence against the basic result (e.g., Ura and Ellis 2008; Soroka and Wlezien 2008,2011; Bhatti and Erikson 2011). Others argue that the implications of unequal responsiveness are overstated. For example, Enns (2015a,b) argues that preferences seldom differ by income groups, and thus low- and middle-income individuals receive a great deal of coincidental representation even when politicians respond primarily to the affluent. Branham, et al. (2017) find that the ideological impact of affluent influence is attenuated because well-to-do constituents have a mix of both liberal and conservative preferences. Thus, while the EEDM has gained traction as the new stylized fact of American politics, there clearly remain significant unresolved debates regarding the nature, pervasiveness, and substance of economic distortions (see generally Erikson 2015). Particularly thorny issues are why and when the rich get what they want.

Another potential distortion of representation is raised by scholars and commentators who worry that elected officials listen almost exclusively to the opinions of their co-partisans or electoral “base”, such that all aspects of American political life are now polarized along party lines. Instead
of worrying that policy is being pulled away from the more moderate policy preferences of the median voter and towards those of the rich, these scholars worry that policy is being pulled towards the more ideologically extreme preferences of partisans. Partisan distortions can arise from a variety of factors—most prominently the need to win primary elections—which create incentives for lawmakers to prioritize the preferences of their co-partisans over the median voter, and over those of other constituent groups (Clausen 1973; Fenno 1978; Gerber and Morton 1998). Not only does this distortion in representation mean that policy may bounce back and forth between ideological extremes as parties come in and out of power, but the partisan distortion can itself become reinforced and entrenched, through the manipulation of electoral rules, gerrymandering, and the like.

Empirical demonstrations of partisan distortions to representation are somewhat limited to date (cf., Shapiro et al. 1990; Clinton 2006; Warshaw 2012; Kastellec et al. 2015) at the same time as such distortions have also become part of the conventional wisdom of modern politics. To figure out how strong co-partisan pressures are requires a larger scale attack than has occurred to date—the Kastellec evidence was from the senate and was perhaps the strongest evidence but limited to Supreme Court confirmations. It is not even clear that both parties are equally responsive to opinion overall (see Krimmel, et al. 2016).

Most importantly, we need to know what happens when partisan loyalties conflict with other pressures... such as those of the rich. What happens when elites have to choose sides, between co-partisans back home, the rich, or the party line? We argue that debates over the importance of class-based inequalities in responsiveness cannot be resolved without considering the context of and in interaction with partisan politics. Can the partisan account explain observed patterns of affluent influence, or vice versa? We have to sort out the roles of party and the purse to properly understand either.

This paper is the first large scale fully integrated attack on these issues. We build on significant work by others, confronting many of the same challenges they did. In particular, we need to know the preferences, on specific issues, of not only the rich and poor but also those of partisan
subgroups. We also need to cover a wide range of policies and roll call votes thereon, so that we can disentangle partisan and economic pressures. This makes results more generalizable, but also increases the instances of disagreement among subconstituencies, a key unit of analysis.

In the past decade, suitable large-scale public opinion survey data has proliferated, and we also have advances in estimation of subgroup opinion. We bring all this to bear on the EEDM debate for the first time, in a large dyadic study of responsiveness to subgroup opinion. Some prior work covered a range of policy issues, but not using actual roll call votes. Other work focused on elite actors as units, most notably the groundbreaking analysis of Bartels (2008), but even this work could only extend to eight roll call votes and could not include estimates of co-partisan opinion. The absence of the latter has been perhaps the primary hindrance to previous work.

In setting up the contrast between partisan and economic distortions, we note that they are potentially competing pressures, but are not necessarily directly competing models, such that one must be wrong for the other to be right. They clearly could limit or complement the other, something which would be missed if we focus theoretically or empirically on only one pressure at a time. By studying how they interact, we will better understand each one and answer the empirical question of which of these strong pressures will win out and when. Indeed, a key EEDM debate rests on whether representation of the poor is simply coincidental to that of the rich. We must also know whether over-representation of the rich is in turn coincidental to pervasive partisan forces. That is, the EEDM and the partisan distortion school could be competing explanations of the stylized fact that the rich get what they want. Much will depend on how much alignment between opinion subgroups there is—and how elites respond when such alignment does not exist. Partisanship may even be the vehicle through which the affluent get what they want. The EEDM could be right descriptively—and there is powerful evidence that it is—without being right causally. And ignoring partisan opinion would then drastically overstate affluent influence.

1On the other hand, the EEDM implies that Democratic and Republican lawmakers are working together to benefit the rich. This would mean either that at least one of the parties is ignoring the preferences of its electoral base on important issues, or that conflict is multidimensional, with both parties giving the rich what they want only on economic issues, while disagreeing on other issues.
Alternatively, the affluent could in fact be dominating. If, say, the rich and co-partisans tend to agree, and we ignore affluent influence, we will falsely point the finger at co-partisan loyalties. Again, what will allow differentiation is a focus on competing influences: if elite domination exists, we should even see the effects when affluent opinion conflicts with that of other important groups, so we put them head to head for the first time. And we can look within party: if economic elites dominate, they should certainly win holding party constant. Taking sides is the key.

Our dyadic analysis of representation in the U.S. Senate uses 50 roll call votes from eight sessions (2001-2015). These include some of the most important economic, social, and foreign policy votes cast by members of Congress from 2001 to 2015 (e.g., healthcare reform, President Obama’s stimulus bill, an extension of the Bush tax cuts on capital gains, the Federal Marriage Amendment, and a vote to withdraw American military personnel from Iraq). For each roll call vote, we use multilevel regression and poststratification (MRP) to create the necessary measures of public opinion for partisan and class subgroups. These enable a wide array of “taking sides” analyses to sort out the various cross pressures.

We start by considering the base-line predictions of the economic elite domination and partisan perspectives. We document patterns of difference and disagreement as well as basic patterns of responsiveness and majoritarian congruence. Our baseline “taking sides” analyses replicate existing findings with new data, yielding some of the broadest and strongest evidence to date for both propositions: (1) the wealthy are more likely than the poor to get what they want, with a greater degree of such inequality than found by Gilens (2012) for recent years; and (2) co-partisans are more likely to prevail than the median constituent.

We then integrate the two perspectives into our core taking sides analyses. For the first time, party and the purse go head to head, and we show what happens when partisans oppose or side with the rich or poor. We also for the first time explore intra-party conflict between rich and poor, as well as one’s co-partisan Senate colleagues, who collectively define “the elite party line.”

2Though often overlooked, Gilens (2012, 199) offered a positive note for contemporary politics. By 2006, the end of his study, degrees of responsiveness across income levels had converged, with the poor about to overtake the rich.
While the first level of our results is compatible with the economic elite dominance view, we show that affluent influence is largely a story of partisan politics. Affluent influence works through and is limited by partisanship. Indeed, party trumps the purse when the two go head to head. We find that (1) Democratic senators are far more responsive than Republicans in general; (2) co-partisan constituents matter more than the rich, to both Democratic and Republican senators; (3) the rich in each state do get what they want more often than the poor, but on average only from Republican senators, and only when Republican constituents want it; (4) within partisan constituencies, the rich beat the poor for both Democrats and Republicans; and (5) even rich co-partisans back home lose out to the elite party line. This is a very different understanding of the democratic deficit in legislative representation than the current literature suggests.

2 Thinking About Representation

Responsiveness and representation are about matching policy and opinion. Quantitative work that seeks to do so can be sorted into “lumping” or “splitting” approaches. Lumping uses measures of policy outcomes or attitudes aggregated in some way over a range of issue areas. Policy liberalism in American states or the ideological leanings of voters represent lumpy measures of policies and opinion, respectively. Splitting is about individual policies/votes or specific opinion questions about them. There are principled reasons for each approach (e.g., some argue splitting could go beyond voters’ capacities for meaningful opinion on policymaking, whereas lumping averages out idiosyncrasies). There were also practical and methodological reasons for lumping given data availability and the limits of opinion estimation. This led to the dominance of ideology scores and the like. Given increased data availability and improved methods, the literature has

3 Telling the story in terms of the rich and not party would be like telling the story of Harry Potter against Voldemort, talking only about Ron.

4 Ramifications of this debate extend to possible reforms. Economic distortions have led some to suggest campaign finance reform or lobbying restrictions to reduce the influence of the affluent. Partisan distortions might point to gerrymandering and closed primary rules that prioritize co-partisan opinion to a re-election-minded legislator.

5 On the other hand, it is not necessarily the case that the public has a meaningful conception of liberal versus conservative so as to enable ideology measures.
augmented the study of system-level outcomes and lumping with new measures and approaches.

Lumping as a stand-alone approach has six concerns that lead us to prefer an approach that is mixed but based more on splitting. The first concern is what we will call the “False Substitutes Problem”: associating liberal policy or vote indices with liberal opinion indices treats all liberal policies as undifferentiated substitutes for each other. It is, in our view, too lenient a test to praise democratic representation for, say, making abortion policy more liberal when it is opinion on immigration issues that got more liberal, or vice versa—yet lumping to produce policy indices and ideological scores may do just that. One must surely think that the actual contents of the policy basket matter, and not just the ideological tone of the basket, to care about responsiveness as a matter of normative democratic theory.

The second pathology, what we will dub the “Non-Common Scale Problem,” was shown best graphically by Erikson, Wright, McIver (1993, 93) (also see Achen 1978, Matsusaka 2001, Gilens 2012, 41). Suppose we regress ideology of policy on ideology of opinion. If the scales of opinion and of policy-making are not the same, the slope and intercept of a responsiveness curve do not have any direct meaning. We cannot tell without knowing the “true” responsiveness curve that connects the scales if there is hyper- or hypo-responsiveness (too steep or insufficiently steep a curve), or if there is liberal or conservative bias (a leftward or rightward intercept shift of the curve). A positive “lumping” slope is compatible with any of these.

A third pathology is an odd reversal across levels of analysis more generally known as Simpson’s paradox, which here would be a “Lumping-Splitting Paradox.” As we show in the appendix, lumpy responsiveness is neither sufficient nor necessary for responsiveness of specific policy choices to specific opinion (see proof by example in an appendix). One can have real split responsiveness policy-by-policy and still find aggregate anti-responsiveness; one can have perverse anti-responsiveness policy by policy and have lumpy showings of responsiveness.

Fourth, the debate over responsiveness versus congruence also invokes lumping versus

---

6Gelman, et al. (2007) shows an example where richer states vote Democratic on average, but within states, richer individuals vote Republican.
splitting. A responsiveness curve lumps all opinion-policy dyads together to see the aggregate relationship, a statistically significant association between opinion and policy. Congruence looks at each dyad in turn to see if the majority got what it wanted. Responsiveness to public opinion need not mean that opinion majorities often get what they want. Nor do high levels of congruence necessarily imply responsiveness. Responsiveness without congruence can occur due to bias or weak responsiveness. Congruence without responsiveness can be coincidental. (See Lax and Phillips 2012 for real-world state-level examples.) Call this “Responsiveness-Congruence Independence.”

Fifth, there is the “Delegate Paradox” (Ahler and Broockman 2017): “representatives who represent their constituencies as closely as possible on every issue can appear polarized and out of step ideologically.” The intuition is that a representative who obeys split mild liberal opinion majorities one by one with her votes leads to a lumping legislator vote score that is extremely liberal, since votes are dichotomous (yes or no) compared to “size of liberal majority” measures. Lumpy vote indices can thus drastically overstate ideological extremism and polarization.

The final concern would arise from a lumpy focus exclusively on system level responsiveness. Representation in the U.S. is dyadic by construction. Political actors, not systems, make choices, and we expect such actors to respond to their own constituencies, not national opinion. In short, there is an “Ecological Inference Problem.” Moreover, systemic policymaking has its own complications that obscure responsiveness pathways. Focusing on the roll call votes of individual senators also allows us to consider whether and how responsiveness differs by legislator type (for example, are Republicans more likely than Democrats to prioritize the opinions of the wealthy).

Obviously, our own approach is not perfect, nor will all assess the trade-offs as we do, but we see it as dealing well with these concerns, which lead us to: prioritize votes cast by elected officials (rather than system-level outcomes); use multiple metrics for representation (including both responsiveness and congruence with opinion majorities); and use measures of opinion specific to the choices at hand (rather than ideology). Our approach attempts to respond to all six

---

7 This can be akin to finding effects that are statistically significant but not substantively important.
8 It then would just be scorekeeping, yielding no insights into causality.
9 See also Broockman (2016) showing citizen ideology scores capture consistency more than policy preferences.
10 The bottom line of policy indicates the normative scope of representation deficits; considering both is important.
concerns above while enabling the comparisons needed to answer the substantive questions of this paper. Specifically, dyadic analysis of specific roll call votes and opinion thereon deals with “False Substitutes,” “Non-Common Scale,” “Lumping-Splitting” as per Simpson, and “Ecological Inference.” Doing both responsiveness and congruence deals with “Responsiveness-Congruence Independence” and the “Delegate Paradox.”

2.1 Economic Distortions of Representation

The seminal empirical contributions on affluent influence come from the work of Bartels (2008) and Gilens (2005, 2012). Bartels studied the roll call voting behavior of individual senators, comparing roll call votes to the self-reported ideology of a senator’s high-, middle-, and low-income constituents. As dependent variables he considered the overall ideological tenor of a senator’s voting record within a given session of Congress (measured using the W-Nominate scores of Poole and Rosenthal) and the way a senator voted on four bills. He also consider votes on four abortion bills, using a measure of constituent attitudes on abortion instead of ideology. He found that “senators are consistently responsive to the views of affluent constituents but entirely unresponsive to those with low income” (275). These eight roll call votes were ample to jump-start a literature showing the dominance of economic elites. With a much larger sample of 50 roll call votes, we can re-validate his findings (with more recent votes), and extend them to new questions. We also will go still further in exploring partisan effects, since we can examine additional and more narrow subgroups of the population than was possible previously.

Gilens focuses not on roll call votes of individual senators and their constituents, but instead on system-level outcomes and national-level opinion. The core data is from 1981-2002, with 1,923 survey questions. He finds that the adoption of public policy follows the issue-specific preferences of the affluent over the low-income. Some of the work goes back further in time to the 1960s.\footnote{Gilens (2012, 199) found differences in responsiveness to the rich over time were much larger than the differences between rich and poor (even circa 1980 when such differences were large). Differences in responsiveness to the poor over time are larger still, twice as large as the difference between rich and poor circa 1980.}

Because the preferences of high and low income income individuals are usually very sim-
ilar, however, Gilens focuses the bulk of his analysis on a subset of his survey data—those survey questions/policy debates for which there is at least a 10 percentage point gap between the preferences of the affluent and those of the poor. Using all data, Gilens (77) shows only small differences in opinion influence, usually on the order of a few percentage points. But in the 10-point-gap subset, Gilens finds that it is only the preferences of the affluent that seem to affect policy.

Other researchers, building off of the work of Bartels and/or Gilens and using similar methodological approaches have also found evidence of inequality in responsiveness (e.g., Rigby and Wright 2011; Ellis 2012; Hayes 2012, 2013; Tausanovitch 2016). Others disagree (e.g., Ura and Ellis 2008; Soroka and Wlezien 2008, 2011; Bhatti and Erikson 2011).

Like Gilens, we look at senators’ responsiveness to the issue-specific preferences of voters, but like Bartels we examine the roll call voting behavior of senators. We focus more on dyadic work, with specific opinion measures and specific policies. This means we depart from Gilens in focusing on a level of choice beneath aggregate policy outcomes.

There is some tension in the recommendations of Gilens for how to think about the ultimate standard of representation: is it the bottom line policy outcome that matters or how we get to that outcome? In pushing for a focus on actual policies adopted, Gilens argues “If representatives’ votes reflect their constituents’ wishes, but other elements of the legislative process prevent those wishes from being realized in policy outcomes, the resulting responsiveness is of little benefit to the public” (2012, 41). Yet elsewhere Gilens (2015) dismisses a bottom-line standard, dismissing any responsiveness to the poor that is coincidental in nature—specifically the finding in his work and others that the poor still often get what they want because they happen to agree with the rich.

We would resolve this tension as follows: responsiveness does depend on actual elite choices, but the bottom line also matters. How much we care as as normative matter about responsiveness and differences in responsiveness, and how much we would prioritize the study of unequal responsiveness as scholars, does indeed depend not only on aggregate policy outcomes (not only on votes), but also on coincidental representation. We do not dismiss coincidental representation, because, on the one hand, it help us understand the scope of the damage from unequal
representation; on the other hand, it helps us remember the second-hand damage that can be done from unequal responsiveness even when not causal. But (1) we want to understand the bottom-line impact of unequal representation for the poor and (2) we do not want to dismiss lesser representation of the poor if—as will be the case—it turns out to happen more on the basis of partisan distortions rather than class ones. We think differences in class representation matter even if class is not the prime mover.

The next debate is how to deal with collinearity of opinion between subgroups. One way Gilens deals with this is to focus on the 10-point-opinion-gap subset, thereby focusing on the subset of cases where he labels rich and poor opinion as differing. He also focuses mostly on separate bivariate regressions of policy on rich opinion and of policy on poor opinion. The coefficients on opinion from each separate regression are then compared. Instead of using the 10 point gap in opinion as cutoff, to deal with collinearity issues we focus on direct conflict between majorities of subgroups. Gilens (42) uses association between policy outcome and level of support to avoid “impos[ing] a predetermined level of support (like 50%),” but we see such predetermination of opposition as a virtue and see 50% as a more natural and objective cutoff than the ten point gap.

---

12 The coefficient on rich opinion shows the marginal effect of rich opinion (or of poor opinion, separately) when there is a 10 point difference in the absolute levels of opinion, not necessarily when there is real disagreement between the groups (which could both be strongly in favor of a given policy). The censored data window moves with the level of poor opinion. Fixing the poor at one point, as the rich opinion goes up from below the poor level, we could see greater rich opinion leading to a greater chance of policy change, until they hit the 20 point window around the poor level, at which point data drops out, before reemerging and showing an effect again after rich opinion surpasses poor opinion by ten points. Is it presumed the effect of the rich is lower during that window? Defining conflict between groups as occurring if one group is above and one below a particular cutoff, say 50%, can be problematic if the difference in opinion is small (we check for this as explained later).

13 Running separate regressions for different independent variables only “solves” the collinearity problem by creating omitted variable bias within each regression, undercutting simple comparisons of coefficients or their significant levels (e.g., “the difference between ‘significant’ and ‘not significant’ is not itself [necessarily] statistically significant” (Gelman and Stern 2006). Gilens also runs supplemental multivariate regressions using a correlated errors approach.
2.2 Partisan Distortions of Representation

The dominance of partisanship can nearly go without saying, for even the most casual observer of contemporary politics. The study of partisan distortions emerged from theoretical work on representation that seeks to understand why candidates and political parties do not converge towards the preferences of the median voter (as per the Median Voter Theorem). A common thread in this work is that in order to obtain or keep elected office, politicians must first secure their party’s nomination and (in nearly all cases) this requires winning a primary election. The need to win primary elections is then thought to incentivize politicians to be particularly attentive to the preferences of their copartisans.

The main thread of the work on partisan distortions explores legislators’ differential responsiveness to their own co-partisans in the electorate. Most recently, Kastellec, et al. (2015), study roll call voting on nominations to the Supreme Court using estimates of support for confirmation broken down by constituent subgroups. They show the distorting effect of the senator’s partisan base, with senators voting 75% with their party median against the median voter, when the two conflict (799). See Wright (1989) and Gerber and Lewis (2004) for negative findings for the same sort of in-party preferences. Warshaw (2012), builds on an early version of Kastellec, et al. to show greater congruence with and responsiveness to fellow partisans for more salient issues in the 107-111th Congresses, using policy-specific opinion. Previous to these, Clinton (2006) showed mixed results for House Republicans in the 106th Congress, that both Republicans and Democrats were more responsive to the preferences of Republicans in their districts.

This suggests a complication in assessing partisan distortions. Krimmel, et al. (2016) takes this on directly, showing that white Democrats in Congress respond more than Republicans or non-white Democrats to overall opinion on gay rights. That is, it need not be the case that both parties are equally responsive in general or with regards to specific groups. If Democrats and Republicans engage with opinion differently, lumping them together can obscure distortions of various sorts.¹⁴

¹⁴Barker and Carman (2012) show that Republican constituents are less likely to prefer a “delegate” model of responsiveness to public will. Broockman and Skovron (2018) show that “politicians of both parties dramatically
2.3 Partisanship and Economic Distortions

Some important work on economic distortions has considered party, though none of this work considers partisan subgroup opinion directly.\(^\text{15}\) By focusing on actual votes by individual senators, we can, for the first time, directly compare co-partisan responsiveness to class-based responsiveness, to put affluent influence into partisan context and assess what happens when the two are in conflict. We also build on Bartels and others to dig further into behavioral differences between Democratic and Republican senators.

Work in the economic tradition that incorporates parties into the analysis almost always does so by considering whether the behavior of one of the two political parties is more distorted by affluent influence. Often, these studies conclude that both parties are more responsive to the preferences of the affluent than the poor, but that Republicans may be more so. Bartels, for example, shows this with separate regressions for Democratic and Republican senators. (See also Ellis 2012, 2013, Brunner et al. 2013). Gilens (2012) compares aggregate responsiveness under eras of Democratic and Republican control of the federal government, finding inequality “appears to be somewhat greater” between the affluent and the poor under Republican control and greater between the affluent and the middle under Democratic control, comparing coefficient sizes in separate bivariate regressions.

Another set of studies connect affluent influence more to Republicans. For example, Rhodes and Schaffner (2017, 186) explore the dyadic relationship between congressional representative ideology (on the nominate scale) and the proprietary Catalist ideology scale, comparing slopes of responsiveness. They also compare legislators’ actual roll call votes to the positions of constituents using data from the 2012 CCES. In both cases, they compare slopes of responsiveness to show Democratic districts show “egalitarian” or “populist” representation while Republican overestimate their constituents support for conservative policies” and that “Republicans overestimate constituency conservatism especially.” Tausanovitch (2016) shows how selection of the partisan representative plays a role in representation.

\(^{15}\)Some work uses slope comparisons and a lumping approach. The “Non-Common Scale Problem” not only the assessment of a single responsiveness slope but also a comparison of slopes.
districts show linear if not “oligarchic” representation. They show that ignoring the party of the representative obscures such patterns, leading to a flat relationship on average. On the other hand, Hayes (2012) uses DW nominate scores and a constituent ideology scale to do representative-level analysis of House and Senate responsiveness over assorted congresses, finding greater responsiveness to the wealthy, with Republicans giving more weight than Democrats to middle income constituents, and greater bias towards the rich after the Democrats took control of the Senate.

3 Opinion Estimation & Data

The survey data for estimates of constituent opinion come from the common content portion of the Cooperative Congressional Election Survey (CCES), the National Annenberg Election Survey, and a variety of other reputable polling firms such as Gallup and Pew.

We estimate state public opinion by income group and by partisan identification using multilevel regression and poststratification (MRP). This technique, first presented by Gelman and Little (1997), uses national surveys and advances in Bayesian statistics and multilevel modeling to generate opinion estimates by demographic-geographic subgroups. MRP has been shown to produce accurate estimates of public opinion by state and by congressional district (Park, Gelman, and Bafumi 2006, Lax and Phillips 2009a, 2013, Warshaw and Rodden 2012), using a relatively small number of survey respondents, as few as contained in a single (moderately-sized) national poll, and fairly simple demographic-geographic models of preferences (Lax and Phillips 2009a). Indeed, MRP has been called the new “gold standard for estimating constituency preferences from national surveys” (Selb and Munzert 2011, 455).

MRP proceeds in two stages. In the first stage, a multilevel model of individual survey response is estimated, with opinion modeled as a function of a respondent’s demographic and geographic characteristics. The state of the respondents is used to estimate state-level effects, which themselves are modeled using additional state-level predictors. Residents from a particular state yield information on how responses within that state vary from others after controlling for demographics. All individuals in the survey, no matter their location, yield information about demographic patterns which can be applied to all state estimates. The second step of MRP is poststrat-
ification: the opinion estimates for each demographic-geographic respondent type are weighted (poststratified) by the percentages of each type in the actual population of each state. This procedure allows us to estimate the percentage of respondents within each state by income category and partisanship who have a particular issue position or policy preference.

In stage one, we model survey response (i.e., whether a respondent supports a given policy proposal) as a function of a respondent’s race and gender combination (males and females divided into four racial categories—black, Hispanic, white, and other), age (18-29, 30-39, 40-49, 50-59, 60-69, and 70+), education (less than a high school education, high school graduate, some college, college graduate, and post-graduate education), partisan affiliation (Democrat, Independent, or Republican), income category (number varying by survey), and state. We allow full interactions between income category, state, and party so the predictive effects of income can vary by states and party within states.

Income effects are modeled as follows. The CCES uses 14 to 16 income categories, depending on the poll.\textsuperscript{16} We model random effects by category with linear trends based on the midpoint of each category and the square root of the midpoint (in case income trends are non-linear) We allow both trend variables to vary by state. These trend variables are useful when modeling opinion for narrow population subgroups (Lax and Phillips 2013).

MRP success depends on good group-level predictors to capture residual differences across states or the like. As a state-level predictor, we use a “demographically purged state predictor” (DPSP) (Lax and Phillips 2013).\textsuperscript{17}

We face a complication that is not present in most applications of MRP. Typically, re-\textsuperscript{16} Some questions use agglomerations of other surveys. These constructed “megapolls” may have dozens of non-overlapping income categories. Rather than estimating separate income effects by poll, we standardize income by assigning subjects to one of the standard CCES categories, employing weights when categories overlap, using a uniform distribution. For example, if an individual in a megapoll has income of $8,000 - $13,000, they would constitute a member of the $0 - $10,000 income group with weight 0.4, and the $10,000 - $20,000 group with weight 0.6.\textsuperscript{17} DPSP is the average liberal/conservative variation in state-level public opinion that is left unexplained by a variety of demographic predictors. Because DPSP was estimated across a wide set of policies, it is a good default when using MRP to predict opinion on a given issue.
searchers poststratify their estimates using population frequencies from the Census “5-Percent Public Use Microdata Samples” or the American Community Survey. Unfortunately for our purposes here, these data do not include partisan identification (but they do include income). Thus, using standard MRP one can estimate the level of support for, say, President Obama’s health care reform among middle-income college-educated black females aged 18-29 in California, but one cannot estimate the level of support among Republican, Independent or Democratic individuals of the same type. Kastellec et al. (2015) presents a solution: “two-stage MRP.” Using the Census data as a starting point, their approach involves an additional stage of MRP to generate a new poststratification file that includes party. We begin by collecting data on individual survey responses about partisan identification (i.e. whether a respondent is a Democrat, Republican, or an Independent) across multiple points in time spanning the years of our public opinion surveys. We then model partisanship as a function of demographic and geographic variables. Specifically, we treat partisanship as a response variable and apply standard MRP to estimate the distribution of partisanship across the full set of “demographic-geographic types” from above. We then have an estimate of the proportion of Democrats, Independents, and Republicans among, say, income-category-3 (30 to 40K) college-educated black females aged 30-45 in California.\footnote{We estimate partisanship using a five year rolling window to increase the number of observations and smooth year-to-year changes in partisanship. Differences are minor.}

We construct estimates of opinion by partisan group (Democrats, Republicans, and Independents). We then construct estimates of opinion by income quintile within each state, forming five equally sized groups so that we can look at the opinion of the “rich” (top quintile), “poor” (bottom quintile), or middle (middle quintile). One advantage of this approach is that we compare rich and poor opinion in each state, not opinion across rich states and poor states (which would result if we used national cutoffs). Similarly, we examine responsiveness to rich and poor co-partisans by taking the top and bottom quintiles of partisans within each state. From these, we derive the median position in each subgroup.

From the surveys, we have identified 50 questions that ask respondents their preferences
on roll call votes that were actually taken by members of Congress (a list with details is provided in Web Appendix Table A1). For example, in 2012, one such questions asked respondents whether they would support a plan to extend Bush era tax cuts for incomes below $200,000; another asked whether the Affordable Care Act should be repealed. The surveys employed ask respondents how they would vote on these issues if they were a member of Congress. These questions include some of the most important economic, social, and foreign policy votes cast by members of Congress since 2000. Our sample of votes includes healthcare reform, President Obama’s stimulus bill, an extension of the Bush tax cuts on capital gains, the Federal Marriage Amendment, and a vote to withdraw American military personnel from Iraq. For each, we focus on the share (of those with an opinion) who favor a “yes” vote. Vote data comes from Congressional Quarterly and Congress.gov.

4 Opinion

We begin with a discussion of our opinion estimates—how much does state-level public opinion differ as a function of economic class and political party? In line with prior research (see Gilens 2012), we find that, on average, there are not large differences between the preferences of high- and low-income Americans. Across all of the roll call votes included in our empirical analysis, the average state-level difference in opinion between the top and bottom quintiles is only nine percentage points. When the rich are more supportive of a policy, so are the poor. These results do not mean, however, that there are not instances of disagreement. In the state-level opinion estimates, the top and bottom quintiles prefer different policy choices (i.e., are on opposite sides of the 50% opinion threshold) approximately 21% of the time.

Figure 1 displays, by roll call vote, the average state-level differences in opinion between the top and bottom income quintiles, grouping the roll calls into three issue types—security, economic, and social. Within our sample, we tend to observe the smallest class-based differences in opinion on social issues, where the average difference between the opinion of the top and bottom quintile are only 5 percentage points. On security and economic matters, class-based differences tend to be much larger, averaging over 11 points.

[Figure 1 about here.]
This figure shows the difference in opinion between the top- and bottom-income quintiles, averaged by issue across states. The “hinges” correspond to the 25th and 75th percentiles. The whiskers extend to the most extreme value within 1.5 of the hinge range.
Within the economic category, there is a greater deal of variation in the amount of class-based polarization across issues. We often observe, for example, high levels of polarization on roll call votes that either largely benefit high-income earners (for example, reducing the capital gains tax) or that clearly benefit low-income individuals (for example, funding the State Children’s Health Insurance Program). In fact, the most polarizing issue in our sample is a 2006 vote to extend a previously enacted capital gains tax cut, for which the average difference in support between the top and bottom income quintiles was over 28 percentage points. We also tend to observe relatively high opinion polarization on free trade issues, where the average class-based difference in opinion is 15 points. That we observe some of the largest amounts of class-based opinion polarization on issues such as these lends face validity to our estimates while also suggesting that if the rich do indeed have a disproportionate influence on the roll call voting behavior of lawmakers, the resulting policies may further economically disadvantage the poor.

The overall patterns noted above are generally also true when we consider our data state by state (shown more fully in Figure A1 in the Web Appendix). In nearly all states, class-based polarization on social issues is lower than such polarization on either economic or security matters. The range of class-based polarization across states is fairly modest.

How do differences in opinion by income compare to partisan differences? See Figure 2.

[Figure 2 about here.]

Partisan opinion polarization is much higher. The mean state-level difference in opinion between Democrats and Republicans is approximately 36 percentage points (compared to only nine percentage points for class). Thus, while the top and bottom income quintiles in a state agree on many issues, self-identified Democrats and Republicans do not. We find that, within a given state, Democrats and Republicans disagree 62% of the time (compared to only 21% by class). This means that on the types of salient issues we study here, a senator’s Democratic and Republican constituents are likely to pressure her to cast very different votes and, therefore, she will often have to decide which group to prioritize.

There is relatively little variation across states in the extent of partisan polarization (see
This boxplot shows the difference in opinion between self-identified Democrats and Republicans, averaged across states by issue.
Web Appendix Figure A2). That is, for any given roll call, most states have a similar degree of partisan opinion polarization. Partisan polarization is, on average, lowest for economic matters and highest on social issues.

Figure 3 brings these together for easier comparison of mean polarization (across states) of each type by issue, with low income differences the norm and party differences ranging from low to high, with no clear pattern by issue type.

[Figure 3 about here.]

Figure 3: How Often Medians Disagree by Issue and by State

Figure 4 further shows how state opinion is more polarized by party than class, now focusing on disagreement rates between medians.

[Figure 4 about here.]

There is only one issue for which class disagreement is substantially more common than partisan disagreement—support for the U.S.-Korea Free Trade Agreement. For nearly all other issues, partisan disagreement is much more common. For many policies, all states have disagreeing party medians; for many policies, no states have disagreeing income medians.
We plot rates of class disagreement (when class medians disagree) and of partisan disagreement (when partisan medians disagree), averaged across states. The hollow symbols show for each of our 50 issues the percentage of states in which the median members of the high- and low-income quintiles have different policy preferences; the solid symbols show the percentage of states in which Democrats and Republicans disagree.
Figure 5 summarizes the rates of disagreement together. The left plot averages across state for each issue. The right plot averages within state across issues. Either way, partisan disagreement, far more than class disagreement, characterizes the senator’s dilemma in pleasing constituents.

**Figure 5: How Often Medians Disagree by Issue and by State**

We plot the rate of class median disagreement against the rate of partisan median disagreement, by issue (averaged over states) on the left and by state (averaged over issues). The 45° line is shown.

We can also look at opinion differences more generally. How often do different segments of the public share the same policy preference? Table 1 displays opinion agreement rates between states’ median, poor, rich, Democratic, and Republican voters.

<table>
<thead>
<tr>
<th></th>
<th>Median</th>
<th>Poor</th>
<th>Rich</th>
<th>Democrats</th>
<th>Republicans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>88</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Rich</td>
<td>90</td>
<td>79</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Democrats</td>
<td>77</td>
<td>84</td>
<td>71</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Republicans</td>
<td>61</td>
<td>50</td>
<td>66</td>
<td>38</td>
<td>–</td>
</tr>
<tr>
<td>Independents</td>
<td>93</td>
<td>84</td>
<td>87</td>
<td>75</td>
<td>63</td>
</tr>
</tbody>
</table>

Agreement rates are, on average, relatively high, in part from overlap in group membership. Democratic opinion coincides with the median more than does Republican opinion; poor and rich
agree with the median at roughly equal rates. The poor and Republicans have the lowest agreement rate of 50%. Republicans agree with the rich more often than the poor, while Democrats agree with the poor more than the rich.

Party conflict is high and partisanship pervasive. Democrats and Republican medians only agree 38% of the time. If we look further, at rich and poor quantiles within each party by state, poor Democrats and poor Republicans only agree 46% of the time. Rich Democrats and rich Republicans only agree 30% of the time. Indeed, rich Democrats are more likely to agree with poor Republicans (46%) than with the rich ones. Rich Republicans are more likely to agree with the overall poor (42%) than with the Democratic rich. Within parties, there is much more agreement. Rich and poor Democrats agree 89% of the time and Republicans likewise 81%.

5 Responsiveness

We start by following the approach of Gilens (2012), to take the preferences of one group at a time—low-income constituents (the bottom quintile), middle-income constituents, or high-income constituents (the top quintile)—and then compare the coefficients on opinion across regression models, the larger the coefficient, the greater the influence. If senators tend to listen more to the wealthy, then the coefficient on opinion should be largest in the model that estimates the relationship between wealthy opinion and roll call voting. One point here is to show that the analysis of our opinion data — modeled using MRP — yields the same substantive conclusions as Gilens’ analysis of raw, unmodeled survey data.

The results of these regressions are reported in Table 2.

<table>
<thead>
<tr>
<th>Opinion of...</th>
<th>State</th>
<th>Poor</th>
<th>Rich</th>
<th>Co-partisans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.69</td>
<td>1.19</td>
<td>2.50</td>
<td>5.59</td>
</tr>
<tr>
<td></td>
<td>(0.19)</td>
<td>(0.16)</td>
<td>(0.21)</td>
<td>(0.16)</td>
</tr>
</tbody>
</table>

*Separate logistic regression models. N = 4,881.*

In these simple regressions, public opinion is a strong predictor of senatorial roll call vot-
ing in each model. However, as we anticipated from the work of Gilens (2012), the size of the coefficient on opinion increases as one moves from lower to higher income groups. An increase in support among the rich from 45% support to 55% support is associated with an increase in the probability of a yes vote of 25 percentage points. The same increase in support from the poor increases the probability of a senator’s vote in favor of the bill by only 11 percentage points, less than half as much. This result is similar to what Gilens (2012) found for policy change. So far, the EEDM is well supported.

Note co-partisan opinion as an alternative. The “effect” is even more striking, with the same 10 percentage point change in opinion among a senator’s co-partisans back home increasing the senator’s probability of voting for the bill by 56 percentage points.

We explore this in Figure 6, which shows slopes for responsiveness to poor, rich, statewide, and co-partisan opinion first for all senators, then broken down by party. For all senators, as in Table 2, the slope is steeper for rich than poor, but steeper still for co-partisans. Democrats seem strongly responsive to the preferences of all four normal categories of opinion (omitting the opposing partisan group). Republican voting behavior seems anti-responsive to every group except co-partisans.

[Figure 6 about here.]

Are Republicans actually responding perversely to public opinion? First note that the average Democratic bill is more popular, which can be seen in popularity distributions along the rug of Figure 6 or more directly in Figure 7, at the level of the bill.19

[Figure 7 about here.]

19We identified the partisanship of bills by the percentage of each senate caucus voting in favor of the bills. Other codings yield similar results. This coding is endogenous to the votes themselves, but only in the aggregate, and that complication would not explain the differences between behavior on Democratic bills versus Republican bills.
Figure 6: Responsiveness

We show responsiveness curves for all senators (the top row) and separately for Democrats and Republicans. The relative distribution of opinion is shown along the x-axis. The outlined and shaded density curves show the distributions of levels of public opinion for Republican and Democratic bills, respectively. Linear regression lines show responsiveness to poor, rich, statewide, co-partisan, and opposing party opinion. The thick, black lines display the relationship between public opinion and senators’ votes on all issues, while the dotted and dashed lines display the relationship for only Democratic and Republican bills, respectively (defined by which side’s senators gave a higher percentage of support).

Figure 7: Support for Each Party’s Bills Among Constituent Subgroups
Taking this into account reveals another instance of Simpson’s Paradox, shown by breaking down responsiveness by party to the partisanship of the bills, as in Figure 8.

Figure 8: Responsiveness by Bill

The Democrats are more responsive to opinion on bills, both their own and those led by the other party. Republicans are mildly responsive to opinion on their own bills, but look anti-responsive to those on Democrats. The party difference in voting on bills—the striking intercept shift—is important. Republicans vote against bills the Democrats side with, and Democratic bills are more popular, leading to the appearance of anti-responsiveness overall.

Thus, odd negative coefficients on opinion that turn up in multivariate regressions (with our data or that of Gilens) might occur even without collinearity. Republicans can look to be anti-responsive to opinion of the poor, rich, and median state opinion in their states even in a bivariate regression because Democratic bills are more popular among the public than Republican bills. As long as Republicans generally take the opposite position of Democrats (or vice versa), voting largely on party lines, the party that takes the less popular position will appear to be anti-responsive to opinion, even if they are still mildly responsive or non-responsive to opinion in each set of bills. Splitting again reveals a deeper, more complicated story, than lumping.
6 Congruence

We next consider congruence, that is, whether a group actually gets the vote that it desires from its senator (as represented by the majority of the group, in turn as represented by its median preference).

Table 3 shows the congruence rates by subgroup. Congruence averaged across all roll votes is a meager 56%. In general, the rich do a bit better than the poor, with a six point advantage, but when rich and poor disagree, this advantage grows to 24 points (the rich beat the poor almost two to one). Co-partisans do better than the rich, 14 points higher.

<table>
<thead>
<tr>
<th>Congruence with...</th>
<th>All Senators</th>
<th>Democratic Senators</th>
<th>Republican Senators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median</td>
<td>56</td>
<td>69</td>
<td>43</td>
</tr>
<tr>
<td>Rich</td>
<td>59</td>
<td>67</td>
<td>49</td>
</tr>
<tr>
<td>Poor</td>
<td>53</td>
<td>72</td>
<td>34</td>
</tr>
<tr>
<td>Rich (if disagreement)</td>
<td>62</td>
<td>39</td>
<td>82</td>
</tr>
<tr>
<td>Co-partisan constituents</td>
<td>73</td>
<td>79</td>
<td>67</td>
</tr>
<tr>
<td>Non-co-partisan constituents</td>
<td>30</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>Co-partisan constituents (if disagreement)</td>
<td>85</td>
<td>86</td>
<td>84</td>
</tr>
</tbody>
</table>

Once again we see that Democratic senators appear to be more responsive to public opinion than their Republican counterparts. Democrats more frequently cast votes consistent with the preferences of state medians, rich medians, poor medians, and copartisan medians than do Republicans. Democrats are even more likely to vote in line with the rich than are Republicans, but vote more in line with poor than rich. Republicans vote more with rich than poor. The big partisan difference in class representation is shown when rich and poor go head to head: Republicans side with the rich 82% of the time and Democrats side with the poor 61% of the time. The affluent influence result then holds only for the votes of Republican senators, not Democrats.20

We now shift to the senator as unit. Figure 9’s top left panel plots each senator by her degree of congruence with her low- and high-income constituents, whether or not they agree with

---

20 This holds also if we look at degrees of incongruence rather than dichotomous measures.
each other. Democrats vote on average with public opinion of both groups more than do the Republicans. That is, both rich and poor are more likely to see their preferences converted into actual senate votes by the Democrats. There does seem to be a slight “bias” towards congruence with the rich among Republicans (above the 45° line) and towards the poor among Democrats (below it). The top right panel shows congruence rates with partisan medians, with each side voting with their co-partisans often and displeasing their opposing partisan constituents often. The bottom panel shows congruence rates with partisan medians and statewide medians. Democrats again are more likely to vote in line with their states. Both sides can be seen to vote on average at the same rate with their fellow partisans.

[Figure 9 about here.]

Figure 10 is similar to Figure 6 but with the y-axis capturing congruence with majority opinion instead of a yes vote. A steep U-shape would show strong majoritarian responsiveness, with a softer one the more likely pattern of weak responsiveness to bare majorities and congruence at the strong extremes. Again, we look at congruence with the various subgroups. Overall, the patterns look normal, lumping all senators together or taking just the Democrats. The Republicans look, if anything, anti-congruent. Why? The dotted lines show votes on Democratic bills and the dashed lines on Republican bills. And Republicans vote for unpopular Republican bills (the norm among such) and against popular Democratic bills (the norm among such). Again, different levels of aggregation can reveal quite different patterns, a la Simpson.

[Figure 10 about here.]
Figure 9: Congruence of Votes with Opinion Groups by Senator: Class, Partisan, and State

The top left shows congruence rates for Democratic and Republican senators with median high- and low-income constituents. The top right shows congruence with party medians. The bottom left shows congruence with state medians vs. co-partisan medians. The bottom right shows congruence with the median high-income or low-income constituent within the senator’s own party. Republicans are triangles; Democrats circles. Point size is scaled to the number of votes cast by the senator.
Figure 10: Congruence

We show congruence curves for all senators (the top row), Democrats (middle), and Republicans (bottom). The relative distribution of opinion is shown along the x-axis. The outlined and shaded density curves show the distributions of levels of public opinion. Locally weighted regression lines show responsiveness to poor, to rich, to statewide, to co-partisan, and to opposing party opinion. The black lines cover all issues; the dotted and dashed lines cover Democratic and Republican bills respectively.
7 Taking Sides

Congruence so far need not be zero-sum—rich and poor medians often agree, as do party medians. What happens when they clash? This is tackled in a series of figures starting with Figure 11. In each panel, we look at senators’ voting records when facing conflicting medians of various types, which reduces the possibilities to a single dimension. Every vote is a choice for the senator between pleasing one median or the other, and we explore how often they make each choice, summarized at the senator level.

![Figure 11: Taking Sides—Class Conflict](image)

Each panel shows how senators vote as a percentage when a pair of medians conflict. Republicans are above the lines; Democrats below. Triangle sizes are scaled to the number of votes by senator and are jittered for visibility. Gaussian density distributions are shown. (We get the same results in all “taking sides” graphs if we limit votes to where the opinion levels are not just above and below the 50-50 point, but also divided by at least 10 percentage points.)

In Figure 11, senators to the left vote more with their poor constituents and those to the right with the rich. The median Democrat nearly splits the difference, tipping towards the poor with 61% of 487 votes, with some variation. Sen. Russ Feingold is among those on the left with only one of ten votes for rich against poor; Sen. Claire McCaskill on the right did so four of six. Republicans far more strongly vote in line with the rich, 82% of the time. The average finding of pro-rich bias (62%) is being driven by Republican senators, most strongly by senators such as Sen. James Inhofe with all twelve of his votes, but even by Sen. Arlen Specter with four of seven.
Figure 12 puts this in the context of class medians against statewide medians. Democrats tend to align with the statewide median over the rich slightly, splitting between statewide and poor. Republicans strongly align with rich over the statewide median, and the statewide over the poor.

Figure 12: Taking Sides—The Median Voter

Figure 13 shows the expected partisan split for context—when the party medians disagree (approximately two-thirds of the time), senators strongly but not monolithically favor the position of co-partisans. Many senators occasionally cross the aisle, as it were. A handful of “mavericks” are more likely to represent out-partisans than in-partisans: Democrats Zell Miller and Bob Torricelli; and Republicans Scott Brown (MA), Olympia Snowe, Susan Collins, and especially Lincoln Chafee (but not, surprisingly, John McCain, voting with his party on 21 of 29 such votes). The bottom shows match co-partisan opinion more than their statewide medians, with similar exceptions.

Figure 13: Taking Sides—Party Conflict
Figure 14 combines these threads, with conflict between class and partisan congruence. The first panel shows that both parties’ senators match co-partisan medians over the position of rich medians. The rich median may beat the poor 2 to 1 in a direct fight, but the partisan medians beat the rich in turn 4 to 1. Both parties also side with co-partisans over the poor. The Republicans have a slightly more partisan record than the Democrats, putting party over the purse 80% of the time. (Those who went with rich over party for the Republicans were Specter, Lott, Snowe, Collins, and Chafee.) The same holds true if we define the rich position nationally instead of state by state.

We can see another side of this. Figure 15 shows that what is really pivotal is where the party median stands, alongside the rich median or instead the poor one. Of the 60 times a Republican senator faced a Republican median in the state siding with the poor median in the state against the rich median in the state, the Republican senators cast 43 votes with the former (72%). Democratic senators similarly voted with party and poor over rich 72% of the time.
While the Republicans drive the high victory rate of rich medians over poor medians, that in turn depends on Republican constituents aligning with the rich; when they align with the poor, the rich advantage becomes a poor advantage. The rich do a bit better than the poor comparing both panels, but the thumb of the partisan constituent is heavy.

Another way to consider partisan opinion is to look within co-partisan subgroups, at conflict within the partisan constituency. E.g., taking the top 20% of Democrats in the state by income, what is the median position? Out of the 50 policies and 50 states (2,500 state-policy units), Democratic rich and poor quintiles disagree 11% percent of the time (265). This connected to 252 votes out of 2,511 cast by Democratic senators that forced a choice between pleasing the in-state Democratic rich and Democratic poor. Republican rich and poor disagree 19% percent of the time (479 out of 2,500), connecting to 466 votes (out of 2,370 total) that forced a choice for Republican senators.

Here, in this limited set of votes, when there is disagreement between the poor and rich within a party, we do find a pattern of affluent influence not limited to Republicans. The top panel of Figure 16 shows how senators take sides between poor and rich, parallel to the top of Figure 11, but for conflict between co-partisan poor and co-partisan rich, not statewide poor and rich.
Again, we see evidence of affluent influence, and here it is true even for Democratic senators. Senators side with the rich 74% of the time, with a moderate difference between Republicans (76%) and Democrats (69%). The second panel limits the sample to where the co-partisan median sides with the poor co-partisan median. The rich partisans do better, even with the thumb of the partisan median on the side of the poor. Of the 313 votes in our sample, senators side with the affluent 71% of the time. The final panel in Figure 16 puts the partisan median thumb on the side of the rich.
All this so far has set aside yet another aspect of partisanship, the elite party line. Figure 17 explores this dimension of partisanship: how does a senator vote when the modal position of her co-partisan Senate peers conflicts with that of her constituents?

We do not see pure party-line voting, but the party position trumps that of rich and of the partisan non-elite over 80% of the time in both parties. Those Republicans who broke from their
fellow partisans and aligned (coincidentally or not) with the rich were the usual suspects: Sens. Chafee, Collins, Snowe, Brown, and Specter. Whatever pull the rich have (or partisan constituents have, for that matter) the party line beats it most of the time, even for Republicans. This reveals a sharp limit to affluent influence and responsiveness in general.

Taking this narrative as a whole, how well-off are the rich? See Figure 18. Yes, the rich get what they want more often than the poor... when the right partisans agree. If extra influence is, in Erikson’s phrase, a luxury available to the wealthy alone, it is not a luxury they can often buy. The partisan market controls the sale. Partisanship conditions and constrains class clout.

Figure 18: Taking Sides Summary

<table>
<thead>
<tr>
<th>Whom Do Rich Voters ‘Win’ Against?</th>
<th>50%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td>Statewide</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partisan</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Poor Partisans</td>
<td></td>
<td>☐</td>
</tr>
<tr>
<td>Partisan Senate Peers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Whom Do Partisan Voters ‘Win’ Against?</th>
<th>50%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dem</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Statewide</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partisan Senate Peers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partisan Senate Peers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary percentages of voting with one group or the other, by party, when a choice forced by conflicting medians, with a 50% dotted line shown. The Democratic percentage is the circle; the Republican the square. The size is scaled to the number of votes for which the two medians conflict.

There are two ways the rich benefit from Republicans. First and foremost, Republican

---

21 Limiting these “taking sides” comparisons to economic issues, Democrats side with the rich even less often.
constituent medians tend to side with the rich. Second, and secondarily, when class differences exist within the Republican constituent coalition, Republican senators side with the Republican rich over the Republican poor. (In this latter sense, so do the Democrats side with their own partisan rich over their partisan poor.)

One should be careful not to overstate the overall substantive impact of Republican senators’ tendency towards the rich. There are only ten Republican pro-rich votes (out of 2,370 Republican votes total) that oppose the statewide median and co-partisan median. Only eight pro-rich votes oppose those along with the poor median. And only three pro-rich votes oppose all those as well as the elite party line. (Even Democrats have more such votes, given greater conflict between their relevant medians.)

8 Conclusion

Our analysis of senate roll call voting brings together, for the first time in an empirical analysis, constituent opinion by income and party. Doing so yields the most direct sense to date of how economic and partisan distortions in representation both fit together and conflict. And they do indeed conflict. Party beats the purse, as much as the purse beats “the people” and the poor.

Erikson (2015, 24) described the EEDM line of work as a “consistent narrative that political representation may be a luxury available to the wealthy alone.” We find instead that while the affluent dominance model is descriptively correct—in that the rich do get what they want more often than the median voter or the poor—this seems as coincidental as the oft-dismissed coincidental representation of the poor. We find that co-partisans dominate, with the rich often indirectly reaping the benefits.

On average, the rich win when co-partisans want the same thing and lose otherwise (for that matter, so do the poor). The observation that the rich get more of what they want arises out of deeper partisan patterns. The average senator of each party sides with their co-partisan constituents over the median voter, sides with co-partisan constituents over rich constituents, and sides with Senate peers over all of these. But unlike the average Republican senator, the average Democratic senator sides with the poor more often than with the rich, since that is how Democratic
constituents lean. The one exception is within party: both Democrats and Republicans side with their rich co-partisans over poor co-partisans.

If the rich are getting what they want, it is more through electing Republicans, who over-represent Republican constituents, and Republican constituents agree with the rich more than with the poor. Even this is limited, since Republican constituents do not always side with the rich, and nor does the Republican party line. Combining the relatively moderate pro-poor Democratic bias and the larger pro-rich bias of the Republicans, the result is a party system that over the last two decades favors the affluent, as a result of the outcomes of partisan conflict.

Is such partisan-led affluent influence a failure of American democracy? Only half a century ago political scientists called for the parties to offer clear, distinct visions of public policy. Now that they are doing so—and one side wins more than the other—should we complain that the party system is broken and needs reform? Would we still call for reforms if Democrats, and the less affluent voters they represent, won “too often”? Partisan patterns of representation alone do not mean the system is rigged. To be sure, it might be too naive to say the Democrats just need to win elections, as we only study one aspect of the policymaking process: taking seated legislators as given. If the rich are rigging the system, it would have to be through elections (electing Republicans who cater to Republican voters who tend to agree with rich policies), through convincing Republican voters to favor the policies the rich like, through taking advantage of redistricting rules to advantage Republicans, or through agenda control (since we study only votes that take place, not those that could, as Gilens does). We do not address such mechanisms. At least when it comes to one important mechanism—to whom senators respond—we find the rigged system claim overstated.

Obviously, our results raise many further questions. We could take things back one step to ask where the opinions of partisans comes from, looking for the role of the affluent in this. We need to ask where the endogenous party line comes from, given the degree to which senators of each caucus stick together. Here, we only studied the Senate, leaving the House as well as

\[^{22}\text{Bartels (2008) showed that the Bush tax cuts were not an example of the rich overpowering the poor. Many poor voters supported the tax cuts. Our results in a sense generalize this finding.}\]
systemic policy outcomes open to study. There are deeper questions of causality to be tackled. There is much intra-party variation to explain. Our findings regarding dyadic representation do not automatically, or even neatly, translate to system-level outcomes, and so we urge a combination of dyadic work like ours and systems level work like Gilens. There are other levels for representation distortions to occur than simply the level of a vote on a given bill. Policymaking within states could be studied with a research design similar to that herein. And, of course, we do not view our findings as a final answer to the main debates of this paper, but hope others take up the main party-or-purse issue for continued investigation.

**Appendix: The Lumping-Splitting Paradox**

Consider three senators, from conservative state C, liberal state L, and moderate state M, defined by average opinion across issues, along with three liberal policies they can support. Figure 19 regresses a liberal policy index (count of liberal policies supported) against a liberal opinion index (average opinion) to yield see a positive responsiveness slope.

![Figure 19: Lumping Three Policies (from Table 4)](image)

The opinion levels and votes behind these lumpy averages are shown in Table 4.

<table>
<thead>
<tr>
<th>State</th>
<th>Policy 1</th>
<th>Policy 2</th>
<th>Policy 3</th>
<th>Opinion Index</th>
<th>Policy Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>99</td>
<td>45✓</td>
<td>45✓</td>
<td>63</td>
<td>2</td>
</tr>
<tr>
<td>M</td>
<td>41 ✓</td>
<td>65</td>
<td>65</td>
<td>57</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>55</td>
<td>55</td>
<td>55</td>
<td>55</td>
<td>0</td>
</tr>
</tbody>
</table>

What happens when we split the lump?
Figure 20: Splitting the Lump (from Table 4)

Figure 20 shows “splitty” responsiveness. For each policy, responsiveness is actually perverse, with more liberal opinion “causing” a lower chance of the liberal policy. It is not that we expect such anti-responsiveness, but rather that even perverse split responsiveness is compatible with normal lumpy responsiveness. Lumpy responsiveness is not sufficient for split responsiveness.

Next, consider a different set of three policies and opinion levels, graphing responsiveness with a splitting approach in Figure 21.

Figure 21: Splitting Three Policies (from Table 5)

Each split responsiveness curve looks normal: higher liberal opinion positively associates with having the liberal policy. Table 5 shows opinion and policy details, and Figure 22 graphs lumpy responsiveness.
Table 5: Splitting

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>0</td>
</tr>
<tr>
<td>M</td>
<td>55 ✓</td>
<td>35</td>
<td>36</td>
<td>42</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>01</td>
<td>55 ✓</td>
<td>64 ✓</td>
<td>40</td>
<td>2</td>
</tr>
</tbody>
</table>

Figure 22: Lumping the Split (from Table 5)

Now we find perverse lumpy responsiveness. Lumping responsiveness is not only not sufficient for split or true responsiveness, it is not necessary
References


### Table A1: Bills/Issues Included in Analysis

<table>
<thead>
<tr>
<th>Bill Name</th>
<th>Survey Year</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bush Tax Cuts</td>
<td>2001</td>
<td>15,850</td>
<td>A proposal to cut taxes.</td>
</tr>
<tr>
<td>Iraq War Authorization</td>
<td>2002</td>
<td>16,181</td>
<td>A vote to authorize military intervention in Iraq.</td>
</tr>
<tr>
<td>Assault Weapons Ban</td>
<td>2004</td>
<td>35,909</td>
<td>A bill to extend the assault weapons ban.</td>
</tr>
<tr>
<td>Estate Tax Repeal</td>
<td>2004</td>
<td>17,468</td>
<td>A proposal to permanently eliminate the federal estate tax.</td>
</tr>
<tr>
<td>Medical Malpractice</td>
<td>2004</td>
<td>14,334</td>
<td>A bill to limit medical malpractice suits.</td>
</tr>
<tr>
<td>Partial Birth Abortion</td>
<td>2004</td>
<td>22,843</td>
<td>A ban on a type of late-term abortion sometimes called “partial-birth abortion.”</td>
</tr>
<tr>
<td>Patriot Act</td>
<td>2004</td>
<td>27,420</td>
<td>Expand the legal tools federal law enforcement can use to stop terrorism.</td>
</tr>
<tr>
<td>Prescription Drug Benefit</td>
<td>2004</td>
<td>19,343</td>
<td>A bill to amend title XVIII of the Social Security Act for a voluntary prescription drug benefit under the Medicare program.</td>
</tr>
<tr>
<td>School Vouchers</td>
<td>2004</td>
<td>56,678</td>
<td>A proposed school voucher program in ten cities.</td>
</tr>
<tr>
<td>CAFTA</td>
<td>2006</td>
<td>31,107</td>
<td>This year Congress also debated a new free trade agreement that reduces barriers to trading between the U.S. and countries in Central America. Some politicians argue that the agreement allows America to better compete in the global economy and would create more stable democracies in Central America. Other politicians argue that it helps businesses to move jobs abroad where labor is cheaper and does not protect American producers. If you were faced with this decision, would you vote for or against the trade agreement?</td>
</tr>
<tr>
<td>Capital Gains Tax</td>
<td>2006</td>
<td>31,155</td>
<td>We’d like to ask about cutting taxes on the money people make from selling investments, also referred to as capital gains. This past year the Senate considered a bill to extend capital gains tax cuts passed in 2001. Some politicians argue that these tax reductions make the economy strong and encourage people to invest more. Others argue that the plan would mostly benefit people who are already rich and that any tax cuts should be shared more fairly among all taxpayers.</td>
</tr>
<tr>
<td>Illegal Immigration</td>
<td>2006</td>
<td>31,150</td>
<td>Another issue is illegal immigration. One plan considered by the Senate would offer illegal immigrants who already live in the U.S. more opportunities to become legal citizens. Some politicians argue that people who have worked hard in jobs that the economy depends should be offered the chance to live here legally. Other politicians argue that the plan is an amnesty that rewards people who have broken the law. If you were faced with this decision, would you vote for or against this proposal?</td>
</tr>
<tr>
<td>Iraq Withdrawal</td>
<td>2006</td>
<td>31,181</td>
<td>Congress also debated a proposal that the president begin phased redeployment of U.S. troops from Iraq starting this year and submit to Congress by the end of 2006 a plan with estimated dates for continued phased withdrawal. Some politicians argue that setting out a plan to withdraw would make Iraqis take responsibility for their country and become more independent of the U.S. Others argue that it is too early to start withdrawing, and that doing so would make terrorists grow bolder. If you were faced with this decision, would you vote for or against a plan to start withdrawing troops this year?</td>
</tr>
<tr>
<td>Minimum Wage</td>
<td>2006</td>
<td>31,145</td>
<td>Congress considered a proposal to increase the federal minimum wage from $5.15 to $6.25 within the next year and a half. Some politicians argue that the wage should be increased because it hasn’t changed since 1997 and many workers still live in poverty. Other politicians argue that raising the wage might force small businesses to cut jobs and would hurt the economy. If you were faced with this decision, would you vote for or against increasing the minimum wage?</td>
</tr>
<tr>
<td>Partial Birth Abortion</td>
<td>2006</td>
<td>31,186</td>
<td>First, we’d like to ask about a proposal in Congress to ban a type of late-term abortion sometimes called “partial-birth abortion.” Some argue that late-term abortion is a barbaric procedure and should be banned. Others argue that late-term abortions are extremely uncommon and used only in exceptional circumstances best determined by a doctor, not the Congress. The proposed legislation could also be the opening to a broader ban on abortion. How about you? If you were faced with this decision, would you vote for or against banning late-term abortion?</td>
</tr>
<tr>
<td>Stem Cell Research</td>
<td>2006</td>
<td>31,132</td>
<td>Now we’d like to ask you about whether the federal government should fund stem cell research. Some in Congress argue that this research may lead to cures for diseases and disabilities affecting large numbers of Americans, and should be funded. Others argue that a potential human life has to be destroyed in order to use these cells, and funding it would be unethical. If you were faced with this decision, would you vote for or against federal funds for this research?</td>
</tr>
<tr>
<td>Extend NAFTA</td>
<td>2008</td>
<td>30,649</td>
<td>Extend the North American Free trade Agreement (NAFTA) to include Peru and Columbia.</td>
</tr>
</tbody>
</table>

Web Appendix (i)
<table>
<thead>
<tr>
<th>Bill Title</th>
<th>Year</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISA</td>
<td>2008</td>
<td>30,645</td>
</tr>
<tr>
<td>Foreclosure Assistance</td>
<td>2008</td>
<td>30,636</td>
</tr>
<tr>
<td>Gay Marriage</td>
<td>2008</td>
<td>30,637</td>
</tr>
<tr>
<td>Iraq Withdrawal</td>
<td>2008</td>
<td>30,616</td>
</tr>
<tr>
<td>Minimum Wage</td>
<td>2008</td>
<td>30,641</td>
</tr>
<tr>
<td>sCHIP</td>
<td>2008</td>
<td>30,641</td>
</tr>
<tr>
<td>Stem Cell Research</td>
<td>2008</td>
<td>30,615</td>
</tr>
<tr>
<td>ACA</td>
<td>2010</td>
<td>48,150</td>
</tr>
<tr>
<td>ARRA</td>
<td>2010</td>
<td>47,899</td>
</tr>
<tr>
<td>DADT</td>
<td>2010</td>
<td>47,692</td>
</tr>
<tr>
<td>Financial Reform</td>
<td>2010</td>
<td>47,692</td>
</tr>
<tr>
<td>Judge Appointment</td>
<td>2010</td>
<td>46,740</td>
</tr>
<tr>
<td>sCHIP</td>
<td>2010</td>
<td>48,145</td>
</tr>
<tr>
<td>ACA Repeal</td>
<td>2012</td>
<td>45,847</td>
</tr>
<tr>
<td>Birth Control</td>
<td>2012</td>
<td>46,776</td>
</tr>
<tr>
<td>Bush Tax Cut Extension</td>
<td>2012</td>
<td>45,474</td>
</tr>
<tr>
<td>House Budget</td>
<td>2012</td>
<td>46,757</td>
</tr>
<tr>
<td>Keystone Pipeline</td>
<td>2012</td>
<td>42,960</td>
</tr>
<tr>
<td>Middle Class Tax Cut</td>
<td>2012</td>
<td>45,549</td>
</tr>
<tr>
<td>US-Korea Free Trade</td>
<td>2012</td>
<td>46,000</td>
</tr>
<tr>
<td>Assault Weapons Ban</td>
<td>2013</td>
<td>49,205</td>
</tr>
<tr>
<td>Background Checks</td>
<td>2013</td>
<td>49,394</td>
</tr>
<tr>
<td>Ban High Capacity Clips</td>
<td>2013</td>
<td>49,356</td>
</tr>
<tr>
<td>Prohibit CO2 Regulation</td>
<td>2013</td>
<td>48,912</td>
</tr>
<tr>
<td>Raise Debt Ceiling</td>
<td>2013</td>
<td>48,530</td>
</tr>
<tr>
<td>Repeal ACA</td>
<td>2013</td>
<td>49,266</td>
</tr>
<tr>
<td>Ryan Budget</td>
<td>2013</td>
<td>48,913</td>
</tr>
<tr>
<td>Agriculture Bill</td>
<td>2014</td>
<td>48,853</td>
</tr>
<tr>
<td>Birth Control Exemption</td>
<td>2014</td>
<td>48,703</td>
</tr>
<tr>
<td>USA Freedom Act</td>
<td>2014</td>
<td>49,182</td>
</tr>
<tr>
<td>Ban Abortion 20 Weeks</td>
<td>2015</td>
<td>48,962</td>
</tr>
</tbody>
</table>

FISA 2008 30,645 Allow U. S. spy agencies to eavesdrop on overseas terrorist suspects without first getting a court order.

Foreclosure Assistance 2008 30,636 Federal assistance for homeowners facing foreclosure and large lending institutions at risk of failing.


Iraq Withdrawal 2008 30,616 Congress considered many important bills over the past two years. For each of the following tell us whether you support or oppose the legislation in principle. Withdraw Troops from Iraq within 180 days.

Minimum Wage 2008 30,641 Increase Minimum Wage from $5.15 to $7.25.

sCHIP 2008 30,641 Fund a $20 billion program to provide health insurance for children in families earning less that $43,000.

Stem Cell Research 2008 30,615 Allow federal funding of embryonic stem cell research.

ACA 2010 48,150 Requires all Americans to obtain health insurance. Allows people to keep current provider. Sets up health insurance option for those without coverage. Increase taxes on those making more than $280,000 a year.

ARRA 2010 47,899 Authorizes $787 billion in federal spending to stimulate economic growth in the U.S.

DADT 2010 47,692 Would allow gays to serve openly in the armed services.


Judge Appointment 2010 46,740 Appoint Elena Kagan to the U.S. Supreme Court.

sCHIP 2010 48,145 Program insures children in low income households. Act would renew the program through 2014 and include 4 million additional children.

ACA Repeal 2012 45,847 Would repeal the Affordable Care Act.

Birth Control 2012 46,776 A Bill to let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.

Bush Tax Cut Extension 2012 45,474 Would extend Bush-era tax cuts for all individuals, regardless of income. Would increase the budget deficit by an estimated $405 billion.

House Budget 2012 46,757 Budget plan would cut Medicare and Medicaid by 42%. Would reduce debt by 16% by 2020.

Keystone Pipeline 2012 42,960 A bill to approve the Keystone XL pipeline from Montana to Texas and provide for environmental protection and government oversight.

Middle Class Tax Cut 2012 45,549 Would extend Bush era tax cuts for incomes below $200,000. Would increase the budget deficit by an estimated $250 billion.

US-Korea Free Trade 2012 46,000 Would remove tariffs on imports and exports between South Korea and the U.S.

Assault Weapons Ban 2013 49,205 Ban assault rifles.

Background Checks 2013 49,394 Background checks for all sales, including at gun shows and over the Internet.

Ban High Capacity Clips 2013 49,356 Ban high-capacity magazines for guns (more than 20 bullets).

Prohibit CO2 Regulation 2013 48,912 Environmental Protection Agency regulating Carbon Dioxide emissions.

Raise Debt Ceiling 2013 48,530 Allow the U S government to borrow funds as needed to meet spending obligations and avoid default on U S government bonds.

Repeal ACA 2013 49,266 Would you vote to Repeal the Affordable Care Act if you were in Congress today?

Ryan Budget 2013 48,913 Budget plan would cut Medicare and Medicaid by 42%. Would reduce debt by 16% by 2020.

Agriculture Bill 2014 48,853 Ends price supports for corn, wheat, sugar and other agricultural products. Creates a federally subsidized crop insurance program. Reauthorizes the food stamp program, but cuts 10% of the program’s funding.

Birth Control Exemption 2014 48,703 A Bill to let employers and insurers refuse to cover birth control and other health services that violate their religious beliefs.

USA Freedom Act 2014 49,182 Would block funding of the National Security Agency’s program that gathers details of every phone call made by or to a U. S. phone unless the records were part of a specific investigation.

Ban Abortion 20 Weeks 2015 48,962 Prohibit abortions after the 20th week of pregnancy.
Figure A1 shows, by state, class-based opinion polarization averaged across all issues (shown by the dark circles) and by each of our three issue types (shown by the lighter-colored circles, squares, and triangles). The figure demonstrates that the overall patterns noted above are generally also true when we consider our data state by state. The squares, which represent state-level polarization on social issues, are almost universally located to the left of the dark circles. This indicates that, in nearly all states, class-based polarization on social issues is lower than such polarization on the “average” issues or for either economic or security matters. Figure A1 also ranks states by their average amount of class-based polarization across all issues. The range across states is fairly modest—Mississippi is the most polarized (with an average opinion difference between the top and bottom income quintiles of approximately 12 percentage points), while California is the least polarized (with an average difference of about 7 points).
This graph shows the average difference in opinion between the top and bottom income quintile for each state. The dark circle represents the average difference across all issues, while the triangle is for economic issues, the light-colored circle for security issues, and the square for social issues.
This graph shows the average difference in opinion between self-identified Democrats and Republicans for each state. The dark circle represents the average difference across all issues, while the triangle is for economic issues, the light-colored circle for security issues, and the square for social issues.
We show the rate of class disagreement (the rich median opposing the policy preference of the poor median within state) for each state, averaged across issues.
We show the rate of party disagreement (the Democratic median opposing the policy preference of the Republican median within state) for each state, averaged across issues.
Let us break down all votes, as shown in Figure A5. The full area captures all 4,881 votes cast by senators on the bills in question. Divisions left to right break votes down by issue type, within each vertical division. The top set of rectangles, almost half the votes, represent votes that please both the bottom and top quintiles (the medians within both quintiles agreed and got what they wanted). The middle set of rectangles capture votes that were against both the median rich person and median poor person in the senator’s state. Finally, the bottom, capturing only 1/5 of all votes, are times when a senator had to vote with one key quintile and against the other. Taking each vote type in turn, we show which choice the senator made.

In economic votes, given conflict, the rich won out over the poor on 55% of economic votes, 61% of social votes, and 74% of security votes. It is these differences (eg. the 5% advantage the wealthy observe on economic issues above the 50% level that would indicate balanced rich and poor representation) that show the extra influence of the rich over the poor. Other times, both or neither get what they want.

That advantage on economic issues is small relative to all votes cast and to the number of votes where senators vote against BOTH the poor and the wealthy. If the poor had equal influence in those times of conflict on economic votes, they would get 0.6 percentage points more senator votes on economic issues (a “whopping” 31 votes out of 4,881), 0.4 on social issues (18 votes), and 1.6 on security votes (77 votes).
Figure A5: Mapping the Votes of Senators

Sample includes 4881 total votes

- 45% align with BOTH groups (2212 out of 4881)
- 33% align with NEITHER group (1629 out of 4881)
- 21% align with ONE group (1040 out of 4881)

45% with Poor (249 out of 559)
55% with Rich (310 out of 559)
74% Rich
61% Rich

The full area represents all votes cast, broken down vertically by alignment with the rich and/or poor medians and horizontally by issue (from left to right: security, social, economic). In the bottom panels, when votes align with only one or the other class median, votes are divided into congruent with poor and rich opinion. The differences in the bottom panel, within each issue, between shaded and un-shaded regions are the class influence effects. They are small compared to the number of votes cast against both rich and poor medians.

Web Appendix (ix)