Measuring Political Inequality in the American States[*]

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Abstract

There is growing concern that the United States is an "unequal democracy" in terms of who exerts influence over the policy decisions made by elected officials. However, to date there have been few attempts to actually quantify the concept of unequal political representation. Moreover, we know little about its institutional origins because most studies of political inequality in the United States focus on the national government where little variation in political institutions exists. To gain a better understanding of unequal political influence, I use large public opinion surveys and a variety of policy data to construct a state-by-state measure of political inequality defined as the extent to which the stated political opinions of citizens with low incomes are underrepresented in the state policymaking process compared to the opinions of the more affluent. I show the robustness of this measure, demonstrate that it varies considerably across the states, and discuss its utility for future studies that seek to examine the underlying causes of unequal political influence. I also compare my newly created measure of political inequality to other methods of evaluating democratic representation and government performance in the American states.

Government responsiveness to public opinion is the cornerstone of American democracy. As V.O. Key (1961, 7) put it, "Unless mass views have some place in the shaping of policy, all the talk about democracy is nonsense." In other words, citizens' political opinions must in some way be reflected in public policy for a system of government to be considered fully democratic.[1] The link is, in effect, the "bottom line of democratic government" (Gilens 2005, 778). Over the past fifty years, political scientists using various research techniques have compiled strong empirical evidence that government policies tend to correspond to the aggregated political opinions of the public at both the national (Page and Shapiro 1983; Monroe 1998; Erikson, MacKuen, and Stimson 2002) and state levels (Erikson 1976; Nice 1983; Erikson, Wright, and McIver 1993; Hill and Hinton-Anderson 1995; Barrilleaux 1997; Radcliff and Saiz 1998; Burstein 2003).[2]

However, an equally important question for the quality of democracy is: *Who* does government respond to when formulating public policy? While the close correspondence between aggregate public opinion and policy is promising, it is also likely that some citizens tend

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[1] However, the extent to which citizens' opinions ought to influence the decisions of elected officials is still widely debated among democratic theorists (e.g., Schumpeter 1942; Pitkin 1967).

[2] In addition to congruence between citizens' political ideologies and general policy liberalism in the states, scholars have also found a close correspondence between public opinion and state policy for specific issue areas such as abortion (Wetstein 1996; Norrander and Wilcox 1999; Arceneaux 2002; Burden 2005), the death penalty (Erikson 1976; Mooney and Lee 2000), environmental policy (Hays, Esler, and Hays 1996), gay rights policies (Haider-Markel and Kaufman 2006; Lax and Phillips 2009b); hate crime legislation (Grattet, Jenness, and Curry 1998; Haider-Markel 2002), and the generosity of welfare benefits (Hill, Leighley, and Hinton-Anderson 1995; Fording 1997; Ringquist et al. 1997).

to have their political opinions better represented than others. If so, then concerns that the United States is an "unequal democracy" (Bartels 2008) may be quite warranted. In this paper, I systematically examine a central question for American democracy: whether state governments respond to their citizens as political equals when implementing public policies (Dahl 1971).

Background

Political scientists and political observers more generally have long warned that political representation in the United States is tainted by an upper class bias – that wealthier citizens have more influence over government policy decisions than the poor (e.g., Schattschneider 1960; Dahl 1961). But, as the American Political Science Association Taskforce on Inequality and American Democracy (2005, 124) recently lamented: "Unfortunately, political scientists have done surprisingly little to investigate the extent of actual inequalities of government responsiveness to public opinion – that is, whether distinct segments of the country exert more influence than others." Instead, political scientists have devoted considerable attention to documenting unequal political participation, or "inputs" into the political system (Piven and Cloward 1988; Hill and Leighley 1994; Verba, Schlozman, and Brady 1995; Verba 2003).[3] As Larry Bartels (2008, 253) aptly points out, "For the most part, scholars of political participation have treated actual patterns of government responsiveness as someone else's problem." In short,

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[3] One reason for the large literature on unequal levels of political participation is that it is relatively easy to measure in a way that inequalities in political representation are not. As Verba and Orren (1985, 15) point out: "Political equality cannot be gauged in the same way as economic inequality. There is no metric such as money, no statistic such as the Gini index, and no body of data comparing countries. There are, however, relevant data on political participation."

political scientists have tended to shy away from actually assessing whether elected officials equally weigh their constituents' opinions when making important policy decisions.

A series of very recent studies have sought to correct this problem and more fully understand unequal political representation in the United States. Jacobs and Page (2005) use parallel opinion surveys of the public and elected officials to show that internationally oriented business leaders leverage far more influence over American foreign policy decisions than the opinions of the general public. Gilens (2005) collects data from nearly 2,000 individual public opinion poll questions and finds that subsequent federal government policy disproportionately reflects the views of the affluent and this is especially true when the preferences of the rich and poor diverge. He concludes that congruence between the political opinions of the poor and government policy tends to arise only in instances where the poor share similar attitudes with the wealthy. Bartels (2008) examines the link between political factors and growing economic inequality and demonstrates that the opinions of affluent constituents strongly predict the voting behavior of their Senators (both their revealed general voting ideology and specific roll call votes) while the opinions of those with low incomes display little or no relationship. In short, this emerging literature points to "unequal democracy" in American national politics.[4]

At the state level, scholars are only beginning to investigate and understand unequal political representation. In the study that most directly relates to this paper, Rigby and Wright (2010) find that state public policies tend to be most responsive to the opinions of the rich, less

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[4] At the city government level, an earlier study of public opinion and policy in 51 American cities found that city policies tended to respond most to the opinions of white citizens and those with higher socioeconomic status (Schumaker and Getter 1977). In contrast, Berry, Portney, and Thomson (1993) found little racial or economic bias in policy responsiveness for the cities they studied.

so to the middle class, and hardly at all to the poor.[5] They also find that this inequality in policy responsiveness is contingent on issue area and a state's wealth: political inequality is especially heightened on economic issues in poorer states where those issues tend to be the primary political cleavage among income groups. In contrast, they find more equal representation on social issues such as abortion, gay marriage, and the death penalty. To date, this is the only study that even begins to explore differential government responsiveness in the American states.

That we know so little about the status of political equality in the states is rather surprising when one surveys the expansive American state politics literature (e.g., Brace and Jewett 1995), especially because state government policy decisions often have an immediate and direct impact on their citizens' daily lives. And, importantly, the policymaking process in the states presents a narrower arena of political conflict, which (potentially) makes it easier for powerful economic interests to dominate the political process and bias policy responsiveness toward the opinions of the wealthy and away from the poor. So, in sum, there are several reasons to further examine the equality of political representation in the American states. In what follows, I empirically assess the degree to which the opinions of the poor, middle class, and the rich are reflected in the policies enacted by their state governments.

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[5] Rigby and Wright derive separate summary measures of citizens' economic and social attitudes by (after imputing a significant amount of missing data) factor analyzing multiple opinion items from the 2000 and 2004 National Annenberg Election Surveys and collapsing the mean opinion measure of low, middle, and high income respondents within each state. They then derive separate summary measures of state policy on economic and social issues by factor analyzing a set of state policies for each area.

Evaluating Political Representation

Although political representation is central for American democracy, there is little consensus on how best to measure the concept. For years, political scientists have experimented with different ways of assessing the link between the people and their government (Achen 1978). One crucial distinction has been whether public opinion is compared to the behavior of individual elected officials (Miller and Stokes 1963; Achen 1978; Erikson 1978; Powell 1982; Bartels 1991; Clinton 2006) or to government policy more broadly (Page and Shapiro 1983; Erikson, Wright, and McIver 1993; Erikson, Stimson, and Mackuen 1995, 2002; Wlezien 2004). I choose to focus on the latter, *policy representation*, because government policy is the final link of the chain that begins with citizens' inputs (their political opinions and behaviors) into the political system. More importantly, regardless of how a citizen's particular state house member or senator votes on any given bill in the state legislature, citizens are ultimately affected by the decisions of the legislature as a whole and the actual policies that are implemented. A citizen's political opinions could be perfectly represented by their particular elected official in the statehouse, but if that citizen's opinions are consistently neglected in the actual policies implemented by the aggregation of elected officials, then we could hardly consider that citizen's opinions "well represented" by their state government.

In the representation literature, this type of political responsiveness is commonly referred to as collective or policy representation. As Weissberg (1978, 547) writes, "Whether or not a particular legislator follows his or her constituency is an important question, but this question is not necessarily the most appropriate one if we ask 'do representatives represent?'" Accordingly, I examine not whether a particular state legislator's roll call votes match up with his or her constituents' opinions, but whether the content of the public policies implemented by state

governments are, in general, more responsive to the opinions of some citizens as compared to others. [6]

There are multiple empirical strategies to assess this opinion-policy link and little scholarly agreement on which best operationalizes the theoretical concept of "political representation." Rather than adjudicate among competing measures, I assess political representation using three different empirical strategies. If different techniques produce similar empirical conclusions, then I can be more confident in the robustness of the results.

First, the *responsiveness* method uses spatial variation across political units such as congressional districts or states to assess the relationship between public opinion and legislator behavior or public policy (Achen 1978; Erikson, Wright, and McIver 1993; Ansolabehere, Snyder, and Stewart 2001; Burden 2005; Griffin and Newman 2005, 2008; Bartels 2008: Lax and Phillips 2009b). Specifically, this method examines whether as opinion becomes more liberal, policy becomes more liberal as well. For my purposes, I ask whether the opinions of citizens with low, middle, and high incomes predict policy across the states when all three opinion measures are included as predictors simultaneously. Doing so allows me to evaluate the relative influence of each income group's opinions as compared to the others (Bartels 2008).

Second, the *proximity* method of measuring political representation attempts to place public opinion and policy on the same metric and compare the "distance" between them. In other words: How far away from a citizen's ideal policy is the government policy actually passed into law? Using this method, as the ideological distance between a citizen's opinion and policy grows, the quality of representation suffers (Golder and Stramski 2010). Matching opinion and

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[6] As Sidney Verba (2003, 666) stated, "Political equality in its fullest sense would be equal policy output."

policy in a common ideological space, however, has proven to be a very difficult task. For decades, scholars of representation have tried to confront this challenge and have devised various methods to match up citizens' opinions and their legislators' in-office behavior to make meaningful comparisons (Miller 1964; Achen 1978; Wright 1978; Kuklinkski 1978; Powell 1982; Burden 2004; Gershtenson and Plane 2007; Griffin and Flavin 2007). However, to date, no study of political representation has attempted to extend this method to match up opinions and policy using a common metric at any level of government. So, I construct measures of proximity between the opinions of citizens in different income groups and state public policy to assess whether policies are ideologically "closer" to the opinions of the affluent as compared to the opinions of the poor.

Third, the *winner/loser* method of measuring representation simply assesses whether a citizen's opinion on supporting or opposing a particular state policy corresponds to the actual state policy in place (Griffin and Newman 2008). For example, if a state allows the death penalty to be imposed for certain crimes, a citizen in that state who supports the death penalty being legal would be coded as a policy "winner," while a citizen who opposes the death penalty being legal would be coded as a policy "loser." I can then look across income groups to determine if poorer citizens are more likely to be policy losers in terms of having their opinions match the public policies of their state.[7]

In sum, while political representation is a fundamental component of American democracy, there is continued disagreement over how to measure this important concept. As explained above, rather than adjudicating among the advantages and disadvantages of each

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[7] This measure of political representation is conceptually similar to Hajnal (2009) who assesses political "losers" by examining which demographic groups tend to vote for the losing candidates in elections.

individual measure, I use three different measures and look for commonalities and trends in the results across them. If multiple measurement techniques yield similar conclusions about the equality of political representation in the American states, then we can be more confident in the robustness of the findings.

Representation as Policy Responsiveness

I begin by evaluating whose political opinions are reflected in policy decisions across the American states. To measure public opinion, I use data from the 2000 and 2004 National Annenberg Election Surveys (NAES), two random-digit dialing rolling cross section surveys conducted in the months leading up to the 2000 and 2004 presidential elections.[8] For years, scholars of state public opinion have wrestled with the problem of not having enough respondents in public opinion polls to make reliable state-level estimates. One way to get around this problem is to aggregate surveys over a long period of time (Erikson, Wright, and McIver 1993). Another way is to simulate state opinion by using national polls and multi-level modeling to derive estimates for the states based on demographic characteristics (Park, Gelman, and Bafumi 2006; Lax and Phillips 2009a, 2009b). The major advantage of these two NAES surveys

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[8] One concern with this data is that respondents were selected from a random *national* sample and not a random sample from *each state*, which may introduce measurement error for state public opinion and lead to underestimating the link between opinion and policy (by inflating the standard errors of the coefficient estimates for public opinion). However, since respondents were selected randomly at the national level, each state sample is also randomly generated which is evidenced by the proportion of respondents in the sample residing in each state very closely approximates that state's actual share of the national population.

is their sheer sample size (nearly 130,000 when they are pooled together) which allows a large enough sample without having to aggregate across years or simulate state opinion. This large sample size is especially important because I disaggregate the opinion data by state and then again into three separate income groups.

To assess whether state public policies are more responsive to some segments of the population over others, I split the sample into three roughly equally sized groups based on self-reported *household income*. These groups are: Low Income ($0-$35,000), Middle Income ($35,000-$75,000), and High Income ($75,000 or greater).[9] Breaking citizens into three groups based on household income is a common technique used in other recent studies of political inequality (Bartels 2008; Erikson and Bhatti 2010; Rigby and Wright 2010). By dividing citizens into these three income groups, I am able to evaluate differential government responsiveness while still maintaining large enough sample sizes within states and within income groups to reliably estimate public opinion.

One issue that immediately arises using this method is that states vary (often widely) in their average household incomes, so different proportions of households will fall into each of the three income categories depending on the state. For example, averaging across 2002-2004, the

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[9] The question wording for household income in the 2000 NAES is: "Last year, what was your total household income before taxes? Just stop me when I get to the right category. Less than $10,000; $10,000 to less than $15,000; $15,000 to less than $25,000; $25,000 to less than $35,000; $35,000 to less than $50,000; $50,000 to less than $75,000; $75,000 to less than $100,000; $100,000 to less than $150,000; or $150,000 or more?" The 2004 wave has identical income categories but the question begins with "Last year, what was the total income before taxes of all the people living in your house or apartment? Just stop me when I get to the right category…"

United States Census Bureau reported West Virginia had the lowest median household income at $32,589 while New Hampshire had the highest at $57,352.[10] Combining the 2000 and 2004 waves of the NAES, the breakdown of the percentage of the state sample that falls into the low income, middle, and high income category for West Virginia vs. New Hampshire is, respectively, 50% vs. 27%, 36% vs. 37%, and 14% vs. 36%. These differences in *group size* matter greatly for the study of representation (Griffin and Newman 2008), for one would expect government to be more responsive to the opinions of a demographic group if it makes up a larger proportion of the population. For example, if state policy does not correspond to the opinions of citizens with household incomes less than $35,000 in West Virginia (who make up fully half of the state's population), then the degree of unequal representation would be quite striking. But if the same situation occurred in New Hampshire, there would be arguably less normative concern since this group makes up only about one quarter of the state's population. To econometrically account for differences in the distribution of household income across the states, I weight opinion measures for each income group by its proportion of the state population in all responsiveness models in the same way as Clinton (2006), Bartels (2008), Erikson and Bhatti (2010), and Rigby and Wright (2010).[11]

I measure citizens' general political ideology (Erikson, Wright, and McIver 1993) as well as their opinions for specific issue areas (Gilens 2005). To measure citizens' general political ideology, I use the following item from the NAES: "Generally speaking, would you describe

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[10] Source: U.S. Census Bureau, Current Population Survey, 2003, 2004, and 2005 Annual Social and Economic Supplements.

[11] This is done by multiplying the measure of state opinion for each income group by its proportion of the total state population.

your political views as very conservative, conservative, moderate, liberal or very liberal?" I then

collapse the data to derive a mean of this -2 to +2 scale for each of the three income groups for

each state.[12] Measures of citizens' self-reported ideology have been commonly used to measure

public opinion in previous studies of political representation (e.g., Erikson, Wright, and McIver

1993; Gray et al. 2004; Griffin and Flavin 2007; Bartels 2008). The main advantage of using

citizens' general political ideologies is that these tend to be more fixed and stable over time

compared to opinions on specific issues (Brace et al. 2004, 2006, 2007; Erikson, Wright, and

McIver 2007).[13]

Measuring opinions for specific political issues is a bit trickier, especially because the

NAES was mainly designed as a national survey to examine the dynamics of presidential

campaigns. As such, many of the policy items ask specifically about what the federal

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[12] Pooling the 2000 and 2004 NAES together yields a total of 128,428 respondents who answered both the

general political ideology and self-reported household income items. All states except Delaware

(N=336), North Dakota (N=346), and Wyoming (N=295) have a sample size of over 400 respondents

(Alaska and Hawaii were not surveyed). The reliability estimates for the low, middle, and high income

ideological opinion measures by state are .91, .96, and .96, respectively. Reliability was calculated using

the following equation: (total variance-error variance)/total variance. In practice, the higher the

proportion of variance that comes from across the states as opposed to within each state and income

group, the higher the reliability coefficient and more confident we are that the opinion estimate are

measuring actual differences in opinions across the states and not random "noise" (Jones and Norrander

1996). When I use an errors-in-variables model that accounts for the reliability of the opinion for each

income group, the results are substantively similar as those reported in Tables 1-3.

[13] For more information, see the 2007 symposium on this topic in *State Politics and Policy Quarterly*

(Volume 7, Number 2).

11

government should or should not do on a particular issue. However, because this is the best

source of data with a sample size large enough to make reliable state-level opinion estimates, I

proceed on the assumption that preferences on what the national government should do will,

generally, extend to preferences about state government action as well (see Norrander 2001;

Brace et al. 2002; Park, Gelman, and Bafumi 2006; Lax and Phillips 2009a, 2009b).

Some policy items were asked in both waves of the NAES, while others were asked in

only one. Additionally, within waves, not all respondents received all policy questions. Below, I

list the question wording used for each issue, along with the response coding and sample size for

the question. All responses are collapsed to derive a mean opinion value by income group within

each state.[14]

- *Death penalty*: "Do you personally favor or oppose the death penalty for some crimes? (0=Favor, 1=Oppose, 2000 wave, N=29,429)

- *Abortion*: "Ban all abortions – should the federal government do this or not?" (0=Ban, 1=Do not ban, 2000 and 2004 waves, N=78,770)

- *Gun control*: Restricting the kinds of guns that people can buy – should the federal government do more about this, the same as now, less or nothing at all? (1=Nothing at all, 2=Less, 3=Same, 4=More, 2000 and 2004 waves, N= 87,210)

- *Gay marriage*: "Would you favor or oppose an amendment to the U.S. Constitution saying that no state can allow two men to marry each other or two women to marry each other?" (1=Strongly favor, 2=Somewhat favor, 3=Neither favor nor oppose, 4=Somewhat oppose, 5=Strongly oppose, 2004 wave, N= 55,594)

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[14] For all issues, more "liberal" opinions are coded higher.

- *Education spending*: "Providing financial assistance to public elementary and secondary schools – should the federal government spend more on it, the same as now, less, or no money at all?" (1=None, 2=Less, 3=Same, 4=More, 2000 and 2004 waves, N=55,594)

- *Health care*: "Providing health care for people who do not already have it – should the federal government spend more money on this, the same as now, less, or no money at all?" (1=None, 2=Less, 3=Same, 4=More, 2000 wave, N=55,437)

- *Temporary Assistance to Needy Families*: "Providing assistance to poor mothers with young children – should the federal government spend more money on this, the same as now, less, or no money at all?" (1=None, 2=Less, 3=Same, 4=More, 2000 wave, N=23,995)

- *Income redistribution*: "Try to reduce the income differences between rich and poor Americans –should the federal government do this or not?" (0=No, 1=Yes, 2000 and 2004 waves, N=57,430)

I then compare these opinions to public policy. To measure public policy, I require both general measures of the "liberalism" (Klingman and Lammers 1984) of policy outputs and data on specific policies across the states. In their seminal book on state opinion and policy, *Statehouse Democracy: Public Opinion and Policy in the American States*, Erikson, Wright, and McIver (1993) developed a composite index of state policy liberalism using eight policy areas for which liberals and conservatives typically disagree. Gray, Lowery, Fellowes, and McAtee (2004) recently updated this policy liberalism measure for 2000 using the following five policy items: (1) state regulation of firearms as measured by state gun laws; (2) scorecard of state abortion laws in 2000; (3) an index of welfare stringency that accounts for Temporary Assistance

13

to Needy Families (TANF) rules of eligibility and work requirements for 1997-99; (4) a dummy measure of state right-to-work laws in 2001; and (5) a measure of tax progressivity calculated as a ratio of the average tax burden of the highest five percent of a state's earners to the average tax burden of the lowest forty percent of a state's earners.[15] These five components are then standardized and summed in an additive index such that more liberal state policies are coded higher. I use this index as my first measure of state public policy liberalism.

Second, a recent article in *State Politics and Policy Quarterly* by Sorens, Muedini, and Ruger (2008) provides a rich source of data on state policies in twenty different areas ranging from social spending to gun control to campaign finance laws to health insurance regulations.[16] In addition to specific statutes and spending data, the authors provide a summary index of policy liberalism for each state that they derive by factor analyzing their entire range of policies. I use this composite score as a second measure of general policy liberalism.[17] Together, the two measures represent the underlying uni-dimensional liberal/conservative ideology of state policy outputs that correspond well to my measure of citizens' general political ideologies.

I also use measures of specific state policies that are intended to match up as closely as possible with the opinion measures presented above. This allows me to assess whether state

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[15] Gray et al. (2004) argue that using these policy items, as opposed to some measure of per capita expenditures for different policy areas, precludes the possibility that policy liberalism is simply a proxy for a state's wealth. The five measures have a measure produces a Cronbach's alpha of .63.

[16] The state policy data can be accessed online at www.statepolicyindex.com.

[17] The two policy liberalism measures correlate at .79.

policy on a particular issue is responsive to opinion on that same particular issue. The policy

measures come from three different sources and are described below:[18]

- *Death penalty*: Does the state have a law allowing legal execution of prisoners? (0=Yes, 1=No, data from Sorens, Muedini, and Ruger 2008)

- *Abortion*: Scorecard of state abortion laws (More "pro-choice" laws coded higher, data from Gray et al. 2004)

- *Gun control*: First principal component of 24 state gun laws (Stricter gun control laws coded higher, data from Sorens, Muedini, and Ruger 2008)

- *Gay marriage*: Legality of same-sex relationships (0=No domestic partnerships, civil unions, or same sex marriage, 1=Limited domestic partnerships only, 2=Civil unions or equivalent, 3=Same-sex marriage is legal, data from Sorens, Muedini, and Ruger 2008)

- *Education spending*: Residuals of regression of education spending as percentage of corrected Gross State Product on federal government grants as % of state earnings and school-aged residents divided by population (Higher education spending coded higher, data from Sorens, Muedini, and Ruger 2008)

- *Health care*: Eligibility for State Children's Health Insurance Program (S-CHIP), as percent of federal poverty line (More generous eligibility pool coded higher, data from Rigby and Wright 2010)

- *Temporary Assistance to Needy Families*: Income eligibility cutoff for TANF recipients (Higher income cutoff coded higher, data from Rigby and Wright 2010)

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[18] As with the measures of public opinion, all issue areas are coded such that "liberal" policies are coded higher.

- *Tax progressivity*: The ratio of the average tax burden of the highest 5 percent of a state's earners to the average tax burden of the lowest 40 percent of a state's earners (More progressive tax system coded higher, data from Gray et al. 2004)

To measure policy representation, I use a responsiveness model (Erikson, Wright, and McIver 1993; Burden 2005; Griffin and Newman 2005: Bartels 2008; Lax and Phillips 2009b; Rigby and Wright 2010) which assesses whether states with more liberal public opinion tend to have more liberal public policies (and, of course, whether states with more conservative public opinion tend to have more conservative policies). By including a separate measure of opinion for each income group, the model measures the relative relationship of each to state policy (Bartels 2008). In practical terms, a positive coefficient for an income group's population-weighted opinion measure indicates that, across the American states, state constituencies in that income group with more liberal preferences tend to have a state government that enacts more liberal public policies (i.e. opinion is a significant predictor of policy). Moreover, the larger the magnitude of the coefficient, the more responsive policy is to opinion. As Rigby and Wright (2010, 15) explain "…if the coefficient for one group is substantially larger than the other, then the interests of that group's constituents are better reflected in states' policy choices."

Therefore, by comparing the opinion coefficient for each income group, I can assess the relative influence of each on state policy. I also include a variable for the proportion of a state's residents in each income category (with the high income category as the reference category). This allows each income group its own separate intercept instead of artificially forcing a similar opinion intercept across all groups (see Erikson and Bhatti 2010; Rigby and Wright 2010).

16

Stated formally, using ordinary least squares regression I model policy responsiveness as follows:

$$P = \alpha + \beta_1(L*LI) + \beta_2(M*MI) + \beta_3(H*HI) + \beta_4(LI) + \beta_5(MI) + \varepsilon$$

where P is state public policy liberalism; L, M, H are mean opinion measures for low, middle, and high income respondents in each state, respectively, and LI, MI, and HI are the proportion of state residents that fall into the low, middle, and high income categories, respectively.

I begin by assessing the relationship between citizens' general liberal/conservative political ideology and state policy liberalism. Table 1, Columns 1 and 2 report OLS coefficients from regressing policy on the three income group opinion measures using the two different measures of state general policy liberalism described above. Column 1 uses the measure of policy liberalism created by Gray et al. (2004) and reveals that all three income groups' preferences are positively related with state policy. However, only the coefficient for the middle income group is bounded above zero at conventional levels of statistical significance. Column 2 uses the measure of policy liberalism created by Sorens, Muedini, and Ruger (2008) and, again, shows that the coefficient for each income group is positive. The coefficients for both middle and high income opinion are positive and statistically significant, but the coefficient for high income opinion is larger. Following previous studies (Bartels 2008; Rigby and Wright 2010), this can be interpreted that the opinions of citizens with high incomes are a better predictor of the tone of state policy than the political opinions of citizens in the middle income group. In contrast, the coefficient for low income opinion is again not statistically different from zero. Taken together, these results reveal little government responsiveness to the general political ideology of citizens in households making less than \$35,000 per year. The political inequality

that others have found at the national level (Gilens 2005; Bartels 2008) appears to extend to the states as well.

[Table 1: Whose Opinions Are Reflected in State Policy Outputs?]

To test the robustness of these results, I use entirely different data for both public opinion and policy. To measure opinion, I pool data from the 1988-1990-1992 National Senate Election Study similar to Bartels (2008, Chapter 9). This data set is useful because it was stratified to include roughly an equal number of respondents from each state (a minimum of 150 and an average of 185). I divide respondents by state into those with a household income below $20,000, those between $20,000 and $40,000, and those above $40,000. I again use citizens' general liberal/conservative political ideology to measure opinion.[19] Like before, I weigh the opinion data by the proportion of respondents in each state that fall into that income category and include the proportion of citizens in the low and middle income groups to allow each group its own intercept in the regression model. To measure the general tone of state policies, I use the original state policy liberalism index created by Erikson, Wright, and McIver (1993, 75-77). The

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[19] The NES ideology item is asked on a 1-7 scale. I flipped and rescaled the variable to run from -3 (very conservative) to +3 (very liberal). The question wording is as follows: "We hear a lot of talk these days about liberals and conservatives. Think about a ruler for measuring political views that people might hold, from liberal to conservative. On this ruler, which goes from one to seven, a measurement of one means very liberal political views, and a measurement of seven would be very conservative. Just like a regular ruler, it has points in between, at 2, 3, 4, 5 or 6. Where would you place yourself on this ruler, remembering that 1is very liberal and 7 is very conservative, or haven't you thought much about this?"

index is a composite of eight different policy areas including level of education spending, the scope of Medicaid eligibility, the scope of Aid to Families with Dependent Children eligibility, consumer protection laws, liberal criminal justice approaches, legalization of gambling, Equal Rights Amendment ratification, and tax progressivity. The results of this model are displayed in Column 3 of Table 1. Again, both the coefficients for middle and high income opinion are positive and statistically significant and the coefficient for high income is larger in magnitude. But, most importantly, the coefficient for low income opinion is again not statistically different from zero (in fact, the estimate is negative). Using alternative data from over a decade earlier, the same result holds: the opinions of poor citizens do not predict the policy outputs of their state governments.

Next, I turn to representation on specific policy issues. I begin by assessing the relationship between citizens' opinions on four so-called "social issues": the death penalty, abortion, gun control and gay marriage. All policies are coded such that more liberal preferences and policies are coded higher. From the standpoint of democratic representation, we should expect the strongest relationship between opinion and policy on these "easy issues" (Carmines and Stimson 1980), issues that are highly salient but not complex. Previous work has argued and empirically demonstrated that elected officials are most likely to follow public opinion on these types of issues (Gormley 1986; Hagen, Lascher, and Camobreco 2001; Hill and Hurley 1999, 2003).

Table 2 displays the results from regressing these four measures of policy on population weighted measures of opinion for low, middle, and high income citizens (items used to construct opinion and policy measures are described above). For the death penalty and abortion, the opinions of citizens in the high income category strongly predict policy as do the opinions of

citizens in the middle income category (though the relationship is weaker). For gun control, the

opinion measures for middle and high income are both positively signed but the coefficient is not

bounded above zero. In contrast, the opinions of citizens in the low income group do not predict

the tone of any of the four policies and the coefficient is actually negative on gun control policy.

[Table 2: Policy Responsiveness on Social/Moral Issues]

The one policy that reveals a different dynamic between the opinion measure for each

income group and policy is the legal status of gay marriage. Here, the coefficients for middle

and high income opinion are negative and statistically significant for citizens in the middle

income group. Substantively, this means that as opinions among the middle income group

become more favorable toward gay marriage across the states, state policy is increasingly less

likely to allow for legal civil unions or marriage among homosexual couples.[20]   The coefficient

for low income opinion is positive, but with a standard error almost twice its size. This outlier

result aside, however, there is generally a correspondence between public opinion and policy for

citizens in the middle and (especially) the high income categories, but again little relationship

between opinion and policy for the poorest Americans.

Next I turn to economic issues and the state government's efforts at income

redistribution. Using the same modeling strategy as before, I assess the opinion-policy linkage in

four areas: education spending, health care, Temporary Assistance for Needy Families (welfare),

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[20] This finding is at odds with the results reported by Lax and Phillips (2009b) who find a close

correspondence between citizens' opinions on several different gay rights issues (adoption, job and

housing discrimination, hate crimes, civil unions) and state policy.

and tax progressivity.[21] The results are reported in Table 3. Looking across the columns, the

main finding is that all three income groups' opinions fail to predict policy at conventional levels

of statistical significance. Only one of the opinion coefficients is statistically significant, and it

is actually negative (low income opinion on TANF).

[Table 3: Policy Responsiveness on Economic Issues]

What explains these results of seeming non-responsiveness to the opinions of all three

groups? I offer two possibilities. First, compared to the analysis for social issues, the economic

opinion measures do not match up as well to the actual economic policies. This is evidenced by

the far smaller R^2 statistics in the models for economic policy (see Table 3). The policy

questions tend to ask whether spending on education, health, or welfare should be

increased/decreased/stay the same, while the policy data measure absolute levels of spending or

eligibility requirements. In effect, this means I am comparing whether states where citizens

desire increased spending for a particular policy area have relatively higher spending levels or

less strict eligibility requirements as compared to other states. This relationship is certainly not

as clear as, say, comparing opinion on abortion to abortion policies.

Second, the economic policies I assess are also more "complex" than the social issues I

assess in Table 2. To make an informed response on whether one wants aid to poor mothers

increased, for example, a respondent would have to know *both* what their desired level of

spending is as well as current spending levels of spending. This is inherently more difficult than

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[21] Since there is no item in NAES about making the tax system more progressive, I use whether citizens

want the government to "reduce income differences" as a proxy.

responding whether one thinks gay marriage should be legal or not. It is not surprising, then, that previous research has found that political elites are more likely to influence public opinion on detailed economic issues rather than the other way around (Hill and Hurley 1999, 2003).

In general, one conclusion that can be drawn from the statistical evidence presented in Tables 1-3 is that across the American states the variance in the political opinions of the poor does not predict variance in state policy outputs. This finding even holds for so-called social issues that have little to do with government's role in income redistribution and, on their face, are not the types of issues one would expect unequal government responsiveness for. Using the responsiveness measure of political representation, the poor consistently do not fare well.

Representation as Opinion-Policy Proximity

While the responsiveness approach to assessing the link between public opinion and policy is widely used in the literature on political representation, it has a major shortcoming: opinion and policy are rarely, if ever, assessed on a common metric.[22] Instead, researchers are left assessing co-variation between opinion and policy, where a larger regression coefficient is usually interpreted as "better" policy responsiveness. However, this method is not without controversy. As Matsusaka (2001) points out, a coefficient of greater than one in a responsiveness model (policy regressed on opinion) may in fact mean that policy is overly or "hyper" responsive to public opinion. If so, a larger coefficient for high and middle income

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[22] One important exception is policies that are dichotomous. In these cases, researchers can ask citizens whether they support/oppose a particular policy and then directly match that to whether that policy is enacted or not. This technique has only recently begun to be utilized by scholars of representation (e.g., Gilens 2005; Lax and Phillips 2009b).

opinion compared to low income opinion may not be evidence of unequal political representation precisely because opinion and policy are not on a common metric and, therefore, not directly comparable to each other (Achen 1978; Erikson and Wright 2000).

Because of this methodological concern, I next turn to measuring representation as proximity between the respondents' political preferences and state policy when the two are measured in a similar ideological space. Specifically, I assess whether the policy decisions of state legislatures are "closer" to the opinions of middle and high income constituents compared to the opinions of poor constituents. These measures have their theoretical foundation in previous studies of congressional representation (Miller 1964; Achen 1978; Wright 1978; Powell 1982, 1989, Burden 2004; Griffin and Flavin 2007). I detail the three different ways I measure proximity below.

First, I first pool citizens' general ideology responses (which range from -2 for very conservative to +2 for very liberal) from the 2000 and 2004 NAES into a single data set. I use self-reported political ideology as opposed to a composite measure of responses to specific policy items because, as discussed above, the specific policy questions differ across the two waves and even within waves different sets of respondents were asked different specific policy items. So, using a battery of policy items to proxy each respondent's ideological orientation would significantly reduce the number of usable respondents, thereby drastically reducing the reliability of the opinion estimates.[23]

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[23] There is considerable debate among state politics scholars on how to measure public opinion in the states. For example, a 2007 issue of *State Politics and Policy Quarterly* (Volume 7, Number 2) was devoted to a debate between Berry et al. (2007) and Brace et al. (2007) over the stability of opinion measurements over time and whether respondents' ideological self-placement or a battery of policy

I standardize all ideological opinions to a mean of zero and a standard deviation of one. Then, I take the two recent measures of general state policy liberalism described above (Gray et al. 2004; Sorens, Muedini, and Ruger 2008) and standardize them as well. After standardizing both opinion and policy, they are now on a common (standardized) metric, similar to the strategy used by Wright (1978). To then measure proximity, I take the absolute value of the difference between a respondent's ideology score and the policy liberalism score for his/her state using both of the measures of policy. This creates a measure of "distance" between *standardized* opinion and policy for each respondent in the NAES sample.

Second, I rescale the two measures of policy to the same scale (-2 to +2) as ideological opinion. This process is similar to that used in early studies of congressional representation (Miller 1964; Achen 1978) and one that is still advocated by representation scholars today (Burden 2004; Griffin and Newman 2008). I again take the absolute value of the distance between a citizen's ideology and policy liberalism for their state that are now on the *same scale*.

Third, I rescale policy to a tighter range (-1 to +1). I do so because we can expect citizens' ideological opinions to have a far greater range and take on more extreme values compared to actual state policy outputs. This transformation to a tighter scale is suggested and implemented by Powell (1982, 1989) in her studies of congressional representation. Again I take the absolute value of the difference between opinion and the *restricted scale* for policy.

Together, I now have six different measures of proximity or "distance" between opinion and policy (3 measurement techniques x 2 policy measures). I am now interested in whether

questions should be used to measure opinion. In this analysis, I side with Brace et al. (and Erikson, Wright, and McIver 2007) and their assertion that ideological self-placements are stable over time and a sensible, reliable, and accurate gauge of public opinion in the states.

state policy is further from the general ideology poor citizens compared to middle and high incomes citizens. In other words, I want to know if a respondent's income group predicts "distance" between opinion and policy. To empirically assess this question, I regress each measure of distance on an indicator of whether a respondent is in the middle or high income group using the same income cutoffs as in the responsiveness analysis and leaving poor citizens as the reference category. Substantively, a negative and statistically significant coefficient tells us that a person in that income group is "closer" (i.e. the distance between opinion and policy is smaller) compared to poor citizens (the reference category). Because citizens that live in a given state all experience the same state public policy (i.e. they are clustered within states), I report standard errors clustered by state for each of the six models.

[Table 4: Three Measures of Opinion-Policy Proximity]

The results of these regressions are reported in Table 4. At the top of each column, the proximity measurement technique and measure of policy liberalism are indicated. Looking across the six columns, the coefficient for middle income is always negative and significant, indicating that policy is consistently closer to the opinions of middle income citizens compared to low income citizens. For high income citizens, the coefficient is negative in all six columns but only bounded above zero at traditional levels of statistical significance for the two columns using the "restricted scale" measure of proximity. Taking these results together, there is evidence that a general measure of state policy liberalism tends to be, on average, furthest from the opinions of citizens in the low income category (the reference category in this set of six regression models). Similar to the results using the responsiveness measure, the political

25

opinions of poor Americans tend not to receive equal consideration alongside the opinions of their more affluent counterparts.

To further illustrate the differences in distance between opinion and policy for the three income groups, I generate figures that show the average distance between opinion and policy for citizens in each state broken down by income group. As before, a larger value on the scale indicates that state policy is further from the opinions of citizens in that income group (i.e. representation is worse). The dot in each figure indicates the mean distance between opinion and policy for citizens within that particular income group within a state when averaged across the states and the vertical bars indicate the 95% confidence interval for the distance estimate. Looking across all six of the graphs presented in Figure 1(A)-(F), the high income group tends to be closest to state policy, followed by the middle income group, and then the low income group is the furthest from state policy. For graphs (E) and (F), the confidence intervals for low income distance and high income distance do not overlap, indicating that they are statistically different at the 95% confidence level.

[Figure 1(A)-(F): Average Distance Between Opinion and Policy, By Income Group]

Finally, I am interested in "ranking" the states according to the degree of political inequality. Specifically, I want to develop a measure that is comparable across the states that captures how much political influence citizens in the low income group exert *compared to* citizens with higher incomes. To do so, I again use the three different measures of opinion-policy proximity. As detailed above, I first standardize all citizens' liberal/conservative ideological responses from and 2000 and 2004 NAES and standardize both measures of state

policy liberalism (Gray et al. 2004 and Sorens, Muedini, and Ruger 2008). This process is similar to that used by Wright (1978) in his attempt to match up citizens' opinions and legislator roll call voting. I then take the absolute value of the distance between a citizen's ideology and policy liberalism for their state. Second, I place state policy liberalism on the same scale as public opinion and take the absolute difference between the two (Miller 1964; Achen 1978; Burden 2004). Third, because policy should not be expected to take on as extreme of a range compared to opinion, I rescale policy to a tighter range (-1 to +1) similar to the process suggested and implemented by Powell (1982, 1989). Again I take the absolute value of the difference between opinion and policy.

In total, I now have six different measures (3 measurement techniques x 2 policy measures) of the "distance" between opinion and policy for every respondent in the 2000 and 2004 NAES. For each state, I then take the average value for each of the six proximity measures for respondents in the low and high income groups and subtract the average opinion-policy distance for citizens in the high income group from the average opinion-policy distance for citizens in the low income group. After subtracting, a state with a positive value indicates that policy in that state is, on average, "further" from citizens in the low income group compared to citizens in the high income group when using that particular measure of distance. When averaging the "proximity gap" between low and high income citizens across the six different measures of proximity, only three states (California, Minnesota, and Montana) have a negative value indicating policy is "closer" to the opinions of the poor than the rich. For the remaining 45 states in the analysis, the distance between opinion and policy is larger for the poor (<$35,000) compared to the rich (>$75,000).

I then repeat the exact same process for the difference in proximity between citizens in

the middle income category ($35,000-$75,000) compared to the low income category, such that

states with positive values indicate that policy in that state is, on average, "further" from citizens

in the low income group compared to citizens in the middle income group when using that

particular measure of distance. When averaging the "proximity gap" between low and middle

income citizens across the six different measures of proximity, only seven states (California,

Maine, Montana, Ohio, Oregon, South Dakota, and Vermont) have a negative value indicating

policy is "closer" to the opinions of the poor than the middle class. For the remaining 41 states

in the analysis, the distance between opinion and policy is larger for the poor than the middle

class.

To create a single score of differential representation that is directly comparable across

the states, I use principal components analysis on the twelve different measures of relative

political representation within each state.[24] I term this measure the Political Inequality Index. A

higher score on this index indicates greater political inequality as policy is least responsive to

(i.e. "further from") citizens in the low income group *as compared to* citizens in both the middle

and high income groups. The ranking of the states is presented in Table 5 along with the

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[24] The six measures of the difference in opinion-policy proximity between the rich and poor and the six

measures for the difference between the middle class and the poor (a total of twelve measures) have a

Cronbach's alpha scale reliability coefficient of .97. The Eigenvalue for the first component is 8.92 and

explains 75% of the variance across the measures.

principal components score for each state.[25] The scores have a mean of zero and a standard

deviation of 2.98.

[Table 5: Political Inequality Index]

Looking at the ranking of states, a handful of poorer Southern states – Mississippi,

Alabama, and Louisiana – appear to cluster at the top of the scale (i.e. have the highest level of

political inequality). Aside from that grouping, however, no clear pattern emerges in terms of

"red" vs. "blue" states or rich vs. poor states. This provides initial evidence that the scale is not

simply a proxy for partisanship, ideology, or a state's wealth. To further examine whether the

Political Inequality Index is distinct from other common state politics measures, I run a series of

correlation tests that are presented in Table 6. The Political Inequality Index correlates only

modestly with the two measures of public policy liberalism I use to create the index, -.52 with

the Gray et al. (2004) measure and -.41 with the Sorens, Muedini, and Ruger (2008). This is

important because it reveals that political inequality is not simply a proxy for more conservative

state public policies (i.e. the poor simply fare better under more liberal policies). Although

across nearly every state citizens in the low income group preferred more liberal policies

compared to citizens in the high income group, the magnitude of this difference varies

considerably across the states and, more importantly, the difference in average distance between

opinion and policy for low income vs. high income citizens and low income vs. middle income

[25] Because the value for each state is a principal components score, the sign of the value (i.e. whether it is

positive or negative) is not substantively meaningful. Instead, the scores serve to illustrate the relative

difference in the magnitude of political inequality from state to state.

citizens varies as well. So, the measure of state political inequality that I construct is distinct from measures of policy liberalism.

[Table 6: Correlation Among the Political Inequality Index and

Other Common State Politics Measures]

The Political Inequality Index also correlates modestly with two other commonly used indicators in the state politics literature. The first is a measure of political culture using Sharkansky's (1969) continuous formulation of Elazar's (1966) famous three component (Moralistic, Individualistic, Traditionalistic) political culture scheme.[26] The two correlate at .48, indicating that more Traditionalistic states have higher levels of political inequality. This is what we would expect given that these states also tend to implement more conservative public policies. Second, the Political Inequality Index correlates negatively (-.49) with Kim Quaile Hill's (1994) Democracy Index which ranks the states in terms of voting rights, partisan and electoral competition, and political participation rates (more democratic states are coded higher). The negative correlation indicates that, as expected, more "democratic" states also tend to more politically equal (i.e. lower levels of political inequality). These comparisons to two other commonly used indicators in the state politics literature provide evidence that the Political Inequality Index is seemingly a reliable and valid measure of the concept of political inequality.

In future work, the Political Inequality Index could be used to test possible mechanisms that explain variation in political inequality across the states. Specifically, the index can be used

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[26] This variable ranges from 1 (Moralistic) to 9 (Traditionalistic), with the middle value indicating an Individualistic political culture.

30

as the dependent variable in a series of statistical estimations that attempt to predict why in some states policy is highly responsive to the affluent but not to the poor while in other states political outcomes are more egalitarian. By taking advantage of this variation across states, we can broaden our understanding about the causes of political inequality in the United States.

Representation as Policy Winning or Losing

In addition to responsiveness and proximity, a third and straightforward method of assessing who gets the policies they desire from their state government is to simply look at the percentage of citizens in different income groups whose opinions on specific issues "match" with the actual policy in their state. If a citizen reports that they support policy X and their state has that policy in place or if they oppose policy X and their state does not have that policy in place, I code that person as a policy winner. If a citizen supports a policy that is not present or opposes a policy that is present, I code that person as a policy loser.

I assess the correspondence between citizens stated opinion and actual state policy for six specific issues that represent a broad array of areas in which state governments can implement policy: (1) the death penalty, (2) the minimum wage, (3) gay marriage, (4) bans on cell phones while driving, (5) parental consent for a minor to obtain a legal abortion, and (6) smoking bans in public areas. To match opinions and policies across an array of specific issues requires drawing on opinion data from multiple national polls and then merging in state policy data for each respondent in the sample. For each issue, I report the percentage of respondents belonging to the

low, middle, and high income groups whose opinion matches state policy.[27] These results (along

with details about the data used for public opinion and policy) are reported in Table 7.

[Table 7: Comparing Percentage of Policy Winners Across Income Groups]

In the rightmost column of Table 7, I report the difference in the percent of people who

are winners in the high compared to the low income category such that a negative number

indicates that people in the low income category are winners less often. As evidenced by a

negative number for each cell in that column, for all six policy areas citizens in the low income

category tend to be policy winners less often than citizens in the upper income group (though the

magnitude of the difference varies by issue). So, Table 7 can be taken as yet another piece of

evidence that the political opinions of citizens with household incomes of less than $35,000 per

year are the least likely to be reflected in state public policies.

A Note on Empirical Limitations in the Study of Political Representation

One problem that arises from the policies chosen for inclusion in Table 7 is that only one,

the minimum wage, is what political scientists would traditionally consider as an economic issue

while most of the others could be placed in the "social/moral issues" category. This is largely

due to the nature of social issues as compared to economic issues. For social issues, government

policy is much more likely to be dichotomous (either the policy is in place or not), while for

economic policies variation across states is instead usually manifested in different levels of

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[27] The income cutoffs for low, middle, and high income vary slightly across opinion surveys. I assign

income cutoffs that, as close as possible, split the sample of respondents into three equally sized groups.

spending. For example, all states participate with the federal government in the Temporary Assistance for Needy Families (TANF) program, but the generosity of those benefits and the stringency of eligibility requirements and sanctions vary considerably by state (Soss et al. 2001; Fellowes and Rowe 2004). Since public opinion polls tend to focus on support/oppose items, it is inherently difficult to match opinions to policies in areas like welfare spending or government aid for medical care. For this reason, much of my empirical analysis in this paper uses citizens' general political ideology as the primary measure of opinion and then matches it up with a general measure of the liberalism of state policies.

Another empirical problem that arises due to the limitations of survey data is whether two respondents who both answer that that they want spending on a particular government service to increase desire spending to increase at *equal magnitudes*. For example, if a respondent prefers a large increase in spending on, say, education, and only a small increase occurs, should they be considered a policy winner? Again, existing survey data presents limitations in terms of how closely opinions and policy can reasonably be compared, and this is especially true for survey items that ask about specific income redistribution programs.

More generally, the statistical relationships I show between citizens' political ideologies or opinions and state public policy does not mean that state lawmakers are implementing these policies *because* of their constituents' opinions, or that they are consciously taking into account only the opinions of wealthy citizens when formulating policy. Although the research design employed in this paper can demonstrate that citizens' with low incomes tend not to have their political opinions reflected in state policies while affluent citizens do, it cannot prove a causal link between opinion and policy. However, the statistical evidence presented in this paper when

taken as a whole does offer, I argue, compelling evidence of "unequal democracy" in the American states.

Conclusion

The correspondence between citizens' opinions and public policy is the "bottom line" for American democracy. A tremendous amount of scholarly effort has been dedicated to showing that citizens' aggregated opinions strongly predict the tone of public policy in both state (e.g., Erikson, Wright, and McIver 1993) and national (e.g., Erikson, MacKuen, and Stimson 2002) politics. Far less attention has been paid to the question: *Whose* opinions are represented by government policy? Recent studies at the national level (Gilens 2005; Bartels 2008) report that the opinions of the poor are especially underrepresented in the policymaking process across a wide array of policy domains.

I have extended this new line of inquiry to the American states and uncovered similar results (also see Rigby and Wright 2010). Using three different empirical measures of political representation, I find that while the opinions of citizens in the middle and high income groups are consistently reflected in state public policies, the opinions of the poor are consistently underrepresented. If "A key characteristic of a democracy is the continued responsiveness of the government to the preferences of its citizens, considered as political equals," (Dahl 1971, 1), the democratic process in the American states seems to fall short of this standard. This finding is especially disconcerting in light of growing evidence that economic inequality and political inequality interact and exacerbate one another (McCarty, Poole, and Rosenthal 2006; Bartels 2008; Kelly 2009).

I find that inequality in political responsiveness applies not just to the general tone of policy in a state but to specific social issues as well, "easy" issues where we might expect more equal representation to occur since rich and poor constituents alike are able to formulate coherent and consistent preferences. Whereas the correspondence between welfare spending preferences and the wide array of complex state welfare policies can often be murky, there should be little cloudiness in the relationship between citizens' opinions and policy for issues like abortion or the death penalty. Even so, on the types of issues where we might expect poorer citizens to fare the best, I find little evidence that their opinions are reflected in the policy outputs of their state governments.

Looking ahead, the most recent and prominent studies of unequal political representation (Gilens 2005; Bartels 2008) have documented wide disparities between the rich and the poor but have stopped short of investigating *why these disparities occur*. Although political scientists and pundits alike have speculated for decades about the causes of unequal political influence, empirical investigation of this topic remains startling limited. In other words, we still have limited understanding and little concrete evidence about the mechanisms that produce unequal political representation. Given evidence that the political opinions of the poor are less reflected in the policy decisions of elected officials compared to the opinions of the middle class and the rich, future work should utilize the variation in political inequality across the states to help better explain and understand why it occurs.

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    Elections." *Legislative Studies Quarterly* 3(3): 445-64.

Table 1: Whose Opinions Are Reflected in State Policy Outputs?

	(1)	(2)	(3)
Policy Liberalism Measure	Gray et al. (2004)	Sorens, Muedini, and Ruger (2008)	Erikson, Wright, and McIver (1993)
Opinion Measure	2000/2004 Annenberg	2000/2004 Annenberg	1988-1992 NES Senate Study
Low Income Opinion	10.962 [10.744]	2.185 [11.779]	-0.228 [1.032]
Middle Income Opinion	27.357** [11.240]	29.673** [12.323]	2.534** [1.117]
High Income Opinion	16.358 [16.431]	36.055* [18.015]	4.454*** [1.382]
% Low Income	5.768 [6.913]	-18.405** [7.579]	-3.753* [1.910]
% Middle Income	-21.806 [13.783]	-53.212*** [15.112]	-2.746 [2.780]
Constant	9.547 [5.789]	31.306*** [6.346]	3.100** [1.169]
R²	0.65	0.81	0.52
N	48	48	48

Data source for dependent variable (state policy liberalism) listed above each column.

Cell entries are OLS regression coefficients, standard errors in brackets.

* denotes p< .10; ** p< .05; *** p< .01. Two-tailed test.

Table 2: Policy Responsiveness on Social/Moral Issues

	(1)	(2)	(3)	(4)
Policy Area	Death Penalty	Abortion	Gun Control	Gay Marriage
Low Income Opinion	16.123	5.634	-9.687	0.574
	[16.350]	[6.200]	[8.093]	[1.167]
Middle Income Opinion	36.360*	7.265	17.798	-3.989**
	[21.986]	[8.847]	[12.338]	[1.740]
High Income Opinion	70.500***	25.987**	18.591	-0.190
	[27.031]	[12.576]	[13.801]	[2.402]
% Low Income	35.291***	-1.208	78.293*	-4.178
	[13.459]	[3.503]	[46.041]	[7.125]
% Middle Income	26.250	-6.621	-27.232	2.081
	[20.373]	[6.820]	[83.035]	[11.484]
Constant	-33.513***	5.911*	-43.662	4.961
	[12.678]	[3.048]	[48.884]	[6.313]
R^2	0.50	0.51	0.64	0.50
N	48	48	48	48

Dependent variable (state policy issue) listed above each column

Cell entries are probit (Column 1) and OLS regression (Columns 2-4) coefficients, standard errors in brackets.

* denotes $p < .10$; ** $p < .05$; *** $p < .01$. Two-tailed test.

Table 3: Policy Responsiveness on Economic Issues

	(1)	**(2)**	**(3)**	**(4)**
Policy Area	Education	Healthcare	TANF	Tax Progressivity
Low Income Opinion	0.009	223.493	-3,217.402***	7.242
	[0.043]	[273.853]	[1111.550]	[9.069]
Middle Income Opinion	0.051	97.018	1146.528	2.672
	[0.043]	[290.935]	[1117.103]	[7.374]
High Income Opinion	-0.075	246.837	1641.046	3.234
	[0.058]	[314.083]	[1694.348]	[10.265]
% Low Income	-0.300	-352.891	15238.797**	-2.938
	[0.245]	[1407.017]	[6581.893]	[8.163]
% Middle Income	-0.383	-82.624	2,715.448	6.337
	[0.300]	[1840.410]	[6966.091]	[10.589]
Constant	0.242	-249.158	-4,617.825	-4.006
	[0.216]	[1132.332]	[5933.567]	[6.199]
R²	0.11	0.37	0.21	0.04
N	48	48	48	48

Dependent variable (state policy issue) listed above each column.

Cell entries are OLS regression coefficients, standard errors in brackets.

* denotes p< .10; ** p< .05; *** p< .01. Two-tailed test.

Table 4: Three Measures of Opinion-Policy Proximity

	(1)	(2)	(3)	(4)	(5)	(6)
Proximity Measure	Standardized		Same Scale		Restricted Scale	
Policy Measure	Gray	SMR	Gray	SMR	Gray	SMR
Middle Income	-0.045*** [0.013]	-0.050*** [0.013]	-0.045*** [0.015]	-0.054*** [0.014]	-0.036*** [0.009]	-0.042*** [0.008]
High Income	-0.037 [0.034]	-0.030 [0.025]	-0.027 [0.042]	-0.029 [0.030]	-0.042** [0.018]	-0.043*** [0.014]
Constant	1.101*** [0.073]	1.086*** [0.059]	1.201*** [0.098]	1.226*** [0.076]	0.896*** [0.030]	0.897*** [0.026]
N	128,428	128,428	128,428	128,428	128,428	128,428

Dependent variable is absolute "distance" between a citizen's ideology and state policy.

Policy measures: Gray et al. (2004) and Sorens, Muedini, and Ruger (2008).

Cell entries are OLS regression coefficients, state clustered standard errors in brackets.

* denotes p< .10; ** p< .05; *** p< .01. Two-tailed test.

Table 5: Political Inequality Index

Mississippi	11.41	Idaho	-0.40
Wyoming	7.63	New Hampshire	-0.57
Alabama	5.66	Missouri	-0.61
Louisiana	3.52	Illinois	-0.90
Georgia	3.25	Nebraska	-0.94
North Dakota	3.09	North Carolina	-1.02
Arkansas	2.18	New Jersey	-1.10
Oklahoma	2.09	Iowa	-1.43
South Carolina	1.80	Washington	-1.61
Rhode Island	1.77	Maine	-1.66
Maryland	1.74	Pennsylvania	-1.78
Virginia	1.38	New Mexico	-2.01
Indiana	1.22	Michigan	-2.09
Nevada	1.14	West Virginia	-2.12
Tennessee	0.84	Wisconsin	-2.25
Connecticut	0.54	Arizona	-2.26
Kentucky	0.53	South Dakota	-2.46
Kansas	0.51	Massachusetts	-2.79
Delaware	0.48	Minnesota	-2.83
Texas	0.23	Vermont	-3.09
New York	-0.03	Ohio	-3.16
Colorado	-0.07	California	-3.67
Florida	-0.28	Oregon	-3.74
Utah	-0.29	Montana	-5.85

Higher value indicates greater degree of political inequality (i.e. political opinions of citizens with low incomes are least reflected in state public policy liberalism compared to middle and high income earners).

**Table 6: Correlation Among the Political Inequality Index and
Other Common State Politics Measures**

	Political Inequality Index	Gray Policy Liberalism	SMR Policy Liberalism	Government Ideology (Liberalism)	Political Culture (Traditional)	Hill Democracy Index
Political Inequality Index	1.00					
Gray Policy Liberalism	-0.52***	1.00				
SMR Policy Liberalism	-0.41***	0.79***	1.00			
Government Ideology (Liberalism)	-0.04	0.46***	0.43***	1.00		
Political Culture (Traditional)	0.48***	-0.40***	-0.39***	0.25*	1.00	
Hill Democracy Index	-0.49***	0.35**	0.28*	-0.13	-0.70***	1.00

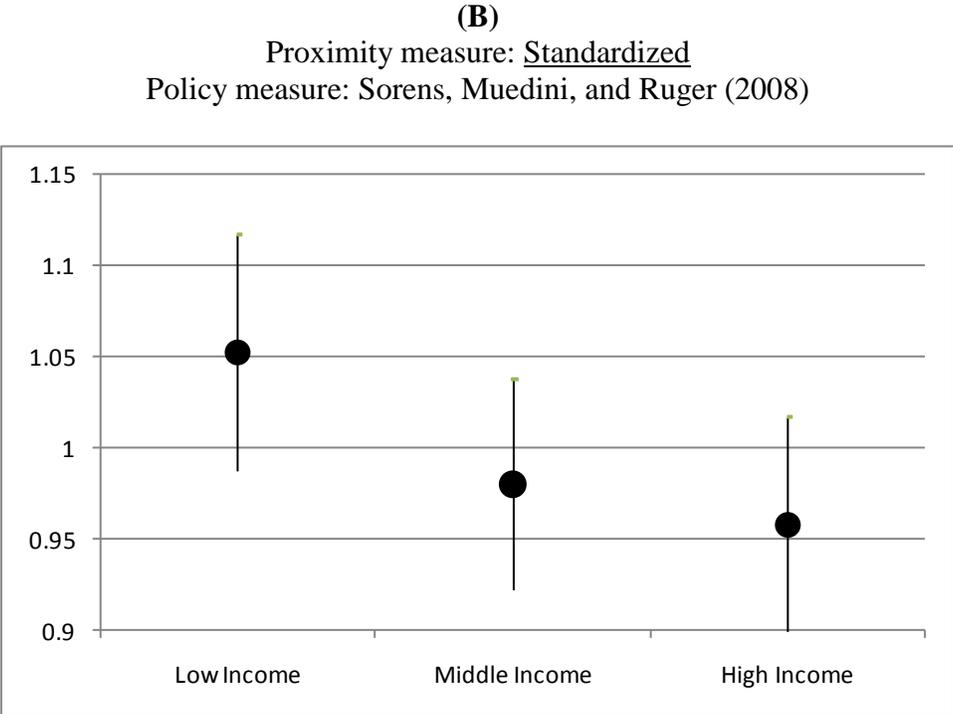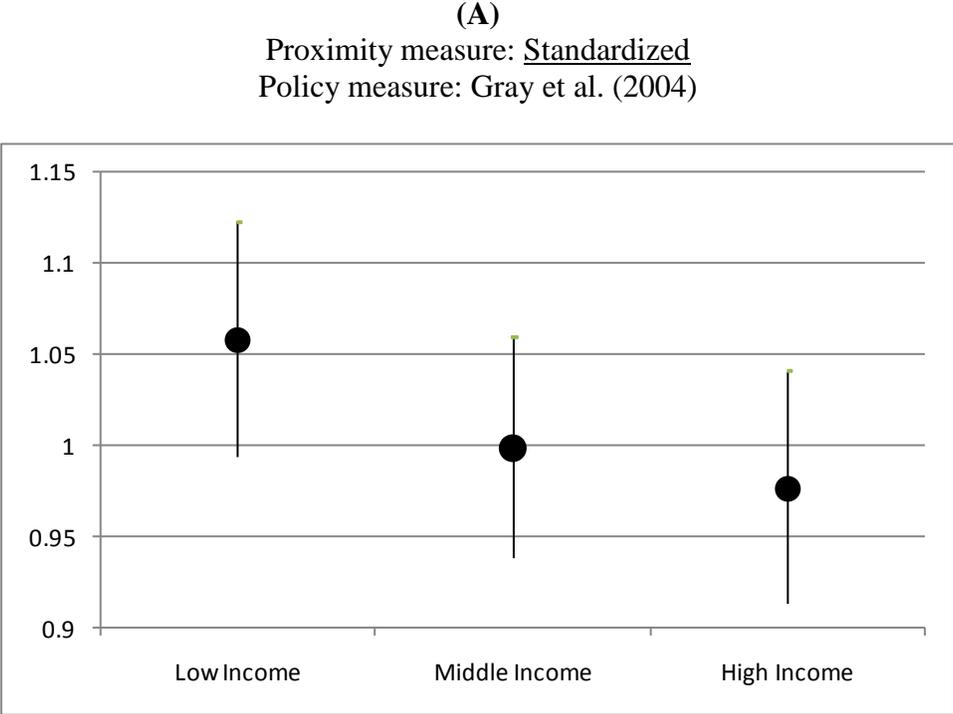Cell entries are pair-wise Pearson correlation coefficients.

* denotes $p < .10$; ** $p < .05$; *** $p < .01$.

Table 7: Comparing Percentage of Policy Winners Across Income Groups

Opinion Measure	Policy Measure	Data Sources	% Winners for Low, Middle, High	% Winners Low Income - High Income
Do you personally favor or oppose the death penalty for some crimes?	Does state impose the death penalty?	2000 National Annenberg Election Survey (NAES), Sorens, Muedini, and Ruger (2008) (SMR)	Low: 67% Middle: 71% High: 70%	**-3**
Do you favor or oppose increasing the $5.15 minimum wage employers now must pay their workers?	Is state's minimum wage higher than the federal level ($5.15)?	2004 NAES, SMR (2008)	Low: 39% Middle: 39% High: 41%	**-2**
Would you favor or oppose a law in your state that would allow gays and lesbians to marry a partner of the same sex?	Does state have constitutional restrictions banning same-sex marriage?	2004 NAES, SMR (2008)	Low: 52% Middle: 52% High: 54%	**-2**
Do you think your state government should -- or should not -- pass a law making it illegal to use a cellular phone while driving?	Does state have ban on using a handheld cell phone while driving?	Gallup News Service Poll # 24 (2001), SMR (2008)	Low: 27% Middle: 37% High: 49%	**-22**
Do you favor or oppose each of the following proposals: A law requiring women under 18 to get parental consent for any abortion.	Does state require parental consent for minor's decision to have an abortion?	Gallup/CNN/USA Today Poll # 2003-03, SMR (2008)	Low: 50% Middle: 55% High: 56%	**-6**
What is your opinion regarding smoking in public places? In restaurants – should they set aside certain areas, should they totally ban smoking, or should there be no restrictions on smoking?	Does state ban smoking in most or all public places?	Harvard School of Public Health/Robert Wood Johnson Foundation Poll # 2006-TOBACCO1, SMR (2008)	Low: 48% Middle: 55% High: 55%	**-7**

Note: Respondents are divided into low, middle, and high income group based as closely to equal thirds as survey categories allow.
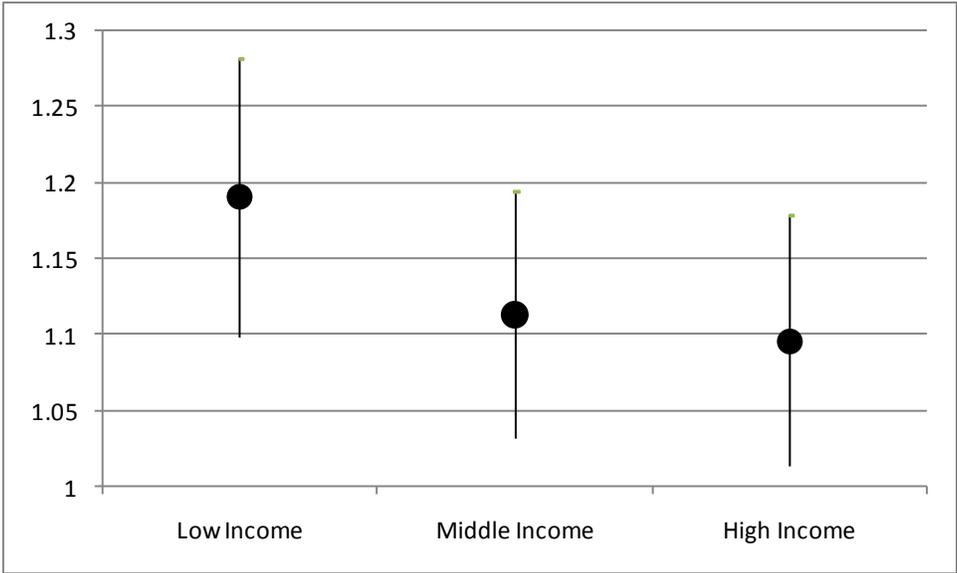
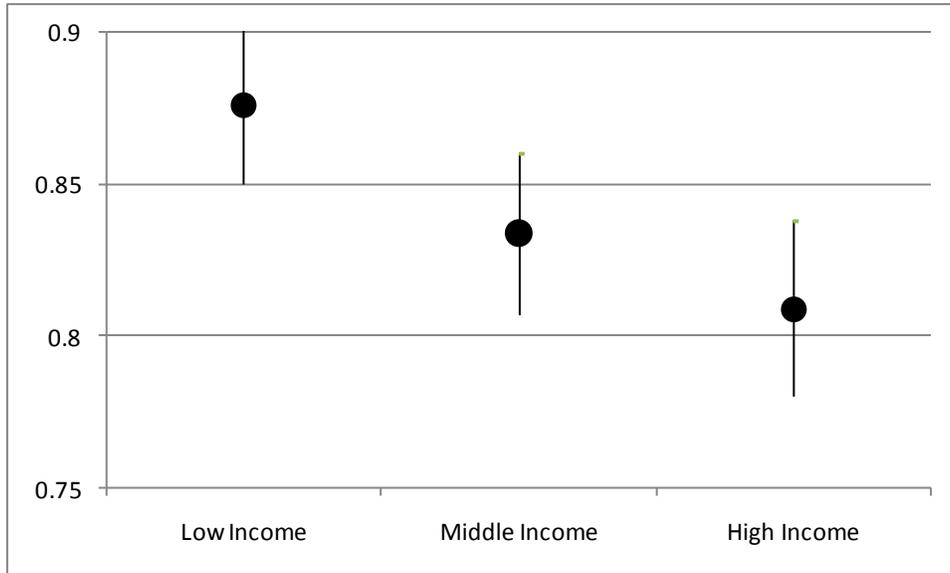**Figure 1: Average Distance Between Opinion and Policy, By Income Group**

(A)
Proximity measure: <u>Standardized</u>
Policy measure: Gray et al. (2004)

(B)
Proximity measure: <u>Standardized</u>
Policy measure: Sorens, Muedini, and Ruger (2008)

(C)
Proximity measure: <u>Same Scale</u>
Policy measure: Gray et al. (2004)
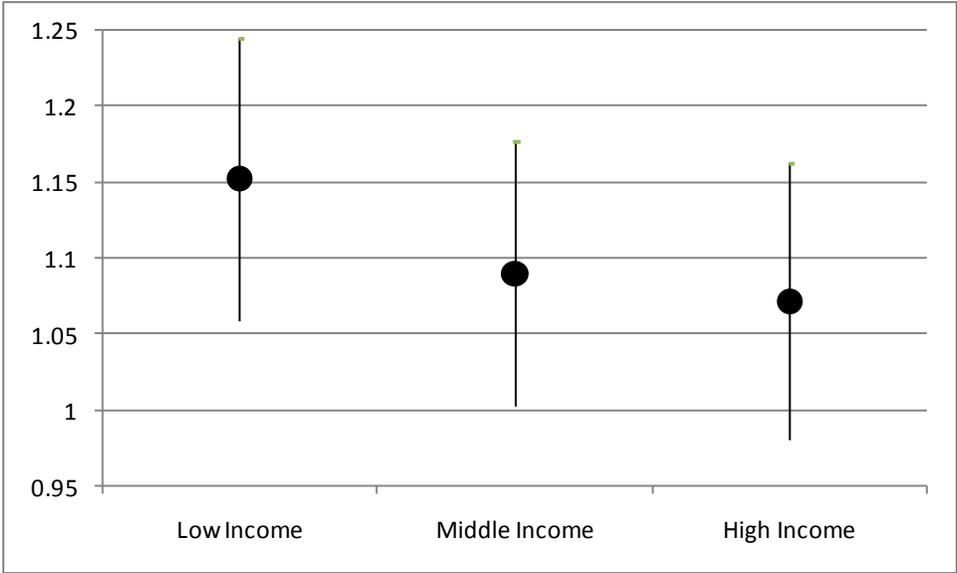
(D)
Proximity measure: <u>Same Scale</u>
Policy measure: Sorens, Muedini, and Ruger (2008)

(E)
Proximity measure: <u>Restricted Scale</u>
Policy measure: Gray et al. (2004)

(F)
Proximity measure: <u>Restricted Scale</u>
Policy measure: Sorens, Muedini, and Ruger (2008)