THE NATURE OF POLITICAL IDEOLOGY IN THE CONTEMPORARY ELECTORATE

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Given the increasingly polarized nature of American politics, renewed attention has been focused on the ideological nature of the mass public. Using Bayesian Item Response Theory (IRT), we examine the contemporary contours of policy attitudes as they relate to ideological identity and we consider the implications for the way scholars conceptualize, measure, and use political ideology in empirical research. Although political rhetoric today is clearly organized by a single ideological dimension, we find that the belief systems of the mass public remain multidimensional, with many in the electorate holding liberal preferences on one dimension and conservative preferences on another. These crosspressured individuals tend to self-identify as moderate (or say "Don't Know") in response to the standard liberal-conservative scale, thereby jeopardizing the validity of this commonly used measure. Our analysis further shows that failing to account for the multidimensional nature of ideological preferences can produce inaccurate predictions about the voting behavior of the American public.

There appears to be a consensus among scholars and political observers that U.S. political elites have grown more polarized in recent decades. Democrats and Republicans in Congress more consistently oppose each other on legislation (McCarty, Poole, and Rosenthal 2006), the party platforms are more ideologically extreme (Layman 1999), and issue activists are more committed to one political party or the other (Stone 1991). In contemporary American

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politics, Republican politicians consistently line up on the conservative side of an issue while Democratic politicians consistently line up on the liberal side, *across different policy domains*. With just the liberal or conservative label, then, we can quite accurately predict a politician's stance on policy issues as disparate as taxes, health care, or abortion. Put another way, the belief systems of political elites in the United States today are captured with a single dimension of ideology.

Can the policy preferences of the American public be similarly characterized? Although this question has been the subject of considerable research over the years (e.g., Marcus, Tabb, and Sullivan 1974; Conover and Feldman 1984; Jacoby 1991), it takes on a new prominence given the recent polarization debate. Some scholars have argued that the sharpening of policy differences between political elites in recent decades has increased ideological identification and polarization in the public as well (Abramowitz and Saunders 1998). In contrast, others argue that the majority of the public remain moderate on most policy issues even as elected representatives have grown further apart (Dimaggio, Evans, and Bryson 1996; Fiorina 2004). Morris Fiorina concludes that the great mass of American people "are for the most part moderate in their views and tolerant in their manner... it is not voters who have polarized, but the candidates they are asked to choose between" (Fiorina 2004, pp. 8, 49).

Given the increasing salience of political ideology in American politics, it seems important to examine how ideology is conceptualized by the public relative to how it is operationalized and measured by researchers. Both sides of the polarization debate seem to assume that the ideological labels people use are a meaningful representation of their public policy preferences—an assumption once challenged by early public opinion research that concluded the public was incapable of ideological thinking (Converse 1964). The generalizations that scholars make about the behavior, attitudes, or thinking of the American electorate could be wholly inaccurate if the liberal-conservative continuum so often used in empirical analysis is an inadequate measure of policy preferences.

In this article, we examine the contemporary contours of policy attitudes as they relate to ideological identity. And we consider the implications for the way scholars conceptualize, measure, and use political ideology in theories and models of political behavior. Although political rhetoric today is clearly organized by a single ideological dimension, we find that the belief systems of the mass public are multidimensional. Using Bayesian Item Response Theory (IRT), a methodological approach with unique advantages over previous estimates of ideological preferences, we show that many in the electorate hold liberal preferences on one dimension and conservative preferences on another. These cross-pressured individuals tend to self-identify as moderate (or say "Don't Know") in response to the standard liberal-conservative scale, raising questions about the validity of this commonly used measure and undermining characterizations of the American public as either policy centrist or ideologically innocent.

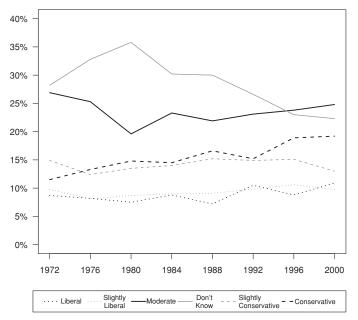


Figure 1. Political Ideology, American National Election Study Cumulative File.

Measuring Ideology

In characterizing the ideological preferences of the American public, scholars typically rely on a survey question asking respondents to place themselves on a liberal-conservative continuum. The question is typically of the following sort: "When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, extremely conservative, or haven't you thought much about this?" ¹

As Fiorina (2004) and others have pointed out, only a small percentage of Americans consider themselves to be extreme ideologues, either liberal or conservative. As shown in figure 1 the plurality of Americans characterize themselves as ideologically moderate or say "Don't Know." Just as Americans like to consider themselves "middle class," individuals like to think of themselves as ideologically moderate. The trend line does suggest that Americans today are better able to place themselves (as evidenced by the decline

^{1.} This is the standard question asked since 1972 in the National Election Study (and often replicated in other surveys).

^{2.} The "extreme" categories are collapsed with the respective conservative and liberal categories. In 2000, for instance, 2 percent of respondents called themselves "extremely liberal" and 3 percent "extremely conservative."

in DK responses), but we also see a corresponding increase in the percentage identifying as moderate.

Does this imply that the public is necessarily centrist in their policy preferences? Or is this a reflection of the "ideological innocence" of the electorate? In other words, what exactly do the ideological labels mean? Classic public opinion research treated the high levels of DK and moderate responses as evidence that the public lacked the political sophistication to think ideologically (Converse 1964). This perspective was bolstered by research showing disconnects between self-identified ideology and policy preferences (Robinson and Fleishman 1988), response instability in ideology questions across time (Kerlinger 1984), and sensitivity to question wording (Schuman and Presser 1981). Levitin and Miller (1979, p. 768) concluded that "when people describe themselves as having an ideological position, they also seem to be saying something about their positions on the parties quite apart from their issue or policy stands." Others found that ideological self-placement was rooted in symbolic considerations, group affiliations, and parental socialization rather than political issues (Conover and Feldman 1981).

In contrast, recent research concludes that the polarization of the broader political environment has helped to clarify the meaning of ideological labels for the general public (Levine, Carmines, and Huckfeldt 1997; Abramowitz and Saunders 1998). When political elites are more ideologically consistent, politics becomes packaged on an ideological basis (Hinich and Munger 1997). Thus, as candidates have polarized and have campaigned on explicitly ideological rhetoric, ideological labels have become increasingly salient for the voters, thereby allowing individuals to better sort themselves into the appropriate ideological category (Levendusky 2009). George W. Bush, for instance, campaigned on a message of "compassionate conservatism" in 2000, and although Al Gore did not label himself a liberal, the media frequently did, and he clearly associated himself with the "liberal" New Deal groups like labor unions and civil rights organizations. Not surprisingly, then, analysis of the 2000 electorate finds that "citizens were able to place candidates and parties quite accurately along the liberal-conservative continuum. In fact, they were not confined to the most knowledgeable strata, as has been the case in most prior election years" (Jacoby 2004, p. 118). Thus, as Knight (1999, p. 62) explains: "while a generation ago direct self-labeling tended to be dismissed (e.g., Free and Cantril 1967), direct measures of liberal-conservatism are now the dominant means of assessing individual ideology in political science."

Yet, even as the public might be more aware of what it means to be a conservative or liberal, it does not mean that the liberal-conservative scale adequately captures their policy preferences. The standard ideology survey question assumes that individuals can be placed on a single (liberal-conservative) dimension but, as the political world has polarized, there is also increasing differentiation between social and economic issues (Shafer and Claggett 1995; Inglehart 1997; Layman and Carsey 2002; Carmines and Ensley 2004). And

the distinctiveness of these two dimensions of ideology might have consequences for our ability to interpret responses to the standard ideology question (Kerlinger 1984).

If ideological preferences are multidimensional, it means that responses to the unidimensional ideology question, especially the moderate and DK categories, likely capture not only those who are centrist but also those who are crosspressured between policy domains. For someone with a liberal position on one policy dimension and a conservative one on another, the "liberal" and "conservative" labels are simply inadequate descriptors of political beliefs. As such, when asked their political ideology on a one-dimensional scale, these individuals should be more likely to say DK or to select the middle category. Research on attitudinal ambivalence has shown that individuals who are torn between competing considerations are more likely to skip the survey question or to select the middling category (Alvarez and Brehm 1995). We expect a similar pattern for the ideologically cross-pressured.³ On the other hand, even if we conceptually recognize the existence of multiple dimensions, a single dimension will remain adequate if ideology is able to predict preferences across a variety of different issue domains, as appears to be the case for political elites (McCarty, Poole, and Rosenthal 2006).

In the analysis that follows, we examine the extent to which the onedimensional ideology question captures the policy preferences of the American public in today's polarized environment by examining the contours of policy attitudes as they relate to ideological identification. We then scrutinize any disconnects between policy preferences and ideological identification to determine if they are the result of inadequacies of the survey respondents or inadequacies of the survey question (Achen 1975).

Data and Methods

To evaluate the relationship between policy attitudes and ideological identity, we estimate latent measures of economic and social policy preferences using Bayesian item response theory (IRT). The Bayesian IRT model offers a number of methodological advantages to alternative methods, such as an additive scale of issues (Heath, Evans, and Martin 1994; Abramowitz and Saunders 1998) or factor analysis (Layman and Carsey 2002; Ansolabehere, Rodden, and Snyder 2008). An additive scale, although easy to compute, assumes that every issue contributes equally to the underlying preference dimension. The IRT measure, like factor analysis, does not require such an assumption. For instance, if social preferences are more strongly related to abortion attitudes than to environmental policy attitudes, this difference will be captured in the IRT discrimination parameters. But in contrast to conventional factor analysis, the IRT measure

^{3.} Using the 1984 NES, William Jacoby similarly finds that attitudinal consistency is related to ideological identification (Jacoby 1991).

does not assume a multivariate normal distribution for all observed variables. When this is not an appropriate approximation (e.g., dichotomous or ordinal variables), conventional factor analysis can produce biased preference estimates (Kaplan 2004).⁴ The IRT model directly models the appropriate distribution of the observed indicators, whether nominal, binary, ordinal, or continuous (or any mixture of types).

Finally, with the Bayesian IRT model, the latent measures (or factor scores) are estimated directly and simultaneously with the discrimination parameters—rather than as postestimation by-products of the covariance structure, as is the case with conventional factor analysis. Consequently, these traits are subject to inference just like any other model parameter, so we can calculate the uncertainty estimates for the latent measures. It is a simple fact that all latent concepts are necessarily measured with error, but alternative methods require the assumption that the resulting estimate is the "true" value. In contrast, we can quantify if we do a better or worse job of estimating someone's placement on the ideological dimensions. And we can then take into account this uncertainty when we use these latent measures as independent variables in subsequent empirical models.

In estimating our latent policy dimensions, we rely on 23 questions from the 2000 American National Election Study (survey details and question wording reported in the appendix). Although these questions do not exhaust the universe of policies that might be related to an individual's general belief system, they offer a wide range of politically relevant issues. Five of the issue questions had a split sample design, in which respondents received either a "scale" or "branching" question format, so each respondent was asked just 18 different policy questions. Because the ideology questions are split between a branching and scale format in the preelection survey, this survey also offers the opportunity to evaluate different approaches to measuring ideological identification.

We model individual issue responses as a function of the unobserved preference dimension via an ordinal item-response model (Treier and Jackman 2008). Given the large number of parameters in the model and the difficulty in estimating the parameters jointly using classical methods of maximum likelihood, we work in a Bayesian setting, using Markov Chain Monte Carlo (MCMC) methods to explore the joint posterior density of the model parameters (for a survey of these methods and their applicability to researchers see Jackman (2000, 2004); Gill (2008)). We implement this MCMC scheme using Win-BUGS (Lunn et al. 2000). We use diffuse normal priors for the discrimination parameters with mean zero and variance 1,000 and standard normal priors for

^{4.} Alternative approaches are available (e.g., factor analysis on polychoric correlation matrix) but these too have limitations and it is more common for researchers to simply ignore this assumption.

5. We let the algorithm run for 100,000 iterations as burn-in, moving away from the start values such that subsequent iterations represent samples from the joint posterior density. Estimates and inferences are based on 500,000 iterations, thinned by 100, in order to produce 5,000 approximately independent draws from the posterior density.

the preferences. The cutpoints are parameterized as the sum of parameters defined as in Treier and Jackman (2008, p. 215) and are assigned priors which ensure the ordinality of the cutpoints.

One attractive feature of the Bayesian approach is that it simplifies treatment of missing data, which are quite high in the measures used—both because of the question wording experiments and because of item nonresponse. For instance, for individual issue questions we find that as many as 14 percent of respondents refused to answer or gave a DK response. In total, just 42 percent of respondents answered all issue questions that were asked of them. With a Bayesian approach, an individual's latent ideology scores are estimated with the data available for that individual, and those estimates are simply less precise for those with less data. Critically, that uncertainty can then be accounted for in subsequent statistical models. In contrast, classical factor analysis would require a correction to the "swiss cheese" data structure, by either collapsing the different question formats, using listwise deletion, or in some way imputing data to fill in the holes.

Estimation of the IRT model requires a number of restrictions for identification. For a one-dimensional model, the location and scale are established by normalizing the mean to zero and the variance to one. For more than one dimension, similar to a confirmatory factor analysis, the parameters can be identified with appropriate restrictions on the discrimination parameters. At minimum, this requires identifying a representative item for each dimension, for which the discrimination parameter is set equal to 1, and restricting at least one of these items to load only on that dimension (for details, see Aguilar and West 2000). To allow for a more complex and realistic latent measure, we impose additional restrictions, as discussed below, and conduct robustness checks to ensure the restrictions do not unduly impact the results.

Dimensions of Ideology

Is one dimension of ideology sufficient to capture the policy preferences of the American public? We compare alternative estimations of latent ideology in table 1. Reported are the estimated discrimination parameters, which tap the extent to which each issue explains variation in the latent scores. If a policy item does not help us distinguish among respondents with different preferences on each dimension, the discrimination parameter will be indistinguishable from zero. The wide variation we see in the size of the discrimination parameters highlights the advantage of the IRT measure over a simple additive scale, which would have assumed that all issues loaded equally on the liberal-conservative continuum.

Starting with the unidimensional measure reported in the first column, we see that the individual social issues do not load as highly on the latent scale compared to the economic issues. We are hesitant to conclude that this means

0.30

Correlation

		Indeper	ndent	Correla	ated
	1D	Economic	Social	Economic	Social
Aid to poor spending	1.49	1.89	-0.24	1.80	0.00
Government services (branching)	1.59	1.67	0.00	1.70	0.00
Guaranteed jobs (branching)	1.33	1.60	-0.18	1.53	0.00
Health insurance (branching)	1.23	1.37	-0.10	1.36	0.00
Public school spending	1.28	1.24	0.26	1.27	0.00
Welfare spending	1.06	1.15	0.01	1.17	0.00
Guaranteed jobs (scale)	0.99	1.13	-0.09	1.12	0.00
Social security spending	0.88	1.10	-0.31	1.03	0.00
Government services (scale)	1.49	1.00	0.00	1.00	0.00
Health insurance (scale)	0.93	0.91	0.08	0.92	0.00
Tax cut from surplus	0.40	0.25	0.50	0.29	0.00
Affirmative action	0.92	0.94	0.12	0.91	0.11
Environment (scale)	1.13	0.99	0.44	0.87	0.41
Gun control	0.97	0.85	0.44	0.73	0.41
Environment (branching)	0.92	0.81	0.37	0.72	0.35
Death penalty	0.46	0.42	0.19	0.38	0.15
Abortion, partial-birth	0.44	0.21	0.76	0.00	0.72
Abortion, parental consent	0.39	0.09	1.12	0.00	0.96
Abortion	0.45	0.00	1.00	0.00	1.00
Women's role (scale)	0.65	0.41	1.06	0.00	1.09
Women's role (branching)	0.43	0.11	1.29	0.00	1.14
Gays in military	0.69	0.45	1.58	0.00	1.52
Gay adoption	0.85	0.77	2.43	0.00	2.51
DIC	65,842.6	63,83	39.2	64,01	0.7

Table 1. Discrimination Parameters for One and Two-Dimensional Models

that social issues are necessarily "less important," however. For one, since we included more economic issue questions than social issue questions, it is not terribly surprising that our underlying latent dimension is more economic-based. More importantly, the fact that the social issues all load rather poorly on a single dimension offers an initial indication that these issues might form a distinct dimension. Certainly, scholars have long argued that political issues fall along at least two different dimensions (Shafer and Claggett 1995).

6. Others have identified additional dimensions on foreign policy and race (Carmines and Stimson 1989). As a robustness check, we estimated a third dimension defined in reference to affirmative action attitudes (reported in online appendix on POQ website). This dimension had some odd characteristics—small and even unexpectedly negative loadings on some issues—likely reflecting the small number of questions available. And the largest loadings for this dimension (e.g., welfare spending) had even larger loadings on other dimensions, indicating they were more closely related to another dimension. More importantly for our purposes, the structure of the economic and social

Confirming this expectation, we find that two dimensions of ideology (middle columns in table) better summarize the public's policy preferences, as evidenced by the improvement in the Bayesian deviance information criterion (DIC), the goodness of fit measure. The smaller the value of DIC, the better the model. We also see that the items which loaded weakly on the one-dimensional model are the strongest items on the second (social) dimension.⁷

This two-dimensional model was estimated with the loosest restrictions possible—an unconstrained model where all but two indicators were allowed to load on either dimension.⁸ The economic dimension is defined by the question concerning government spending and services (scale format), while the item on abortion is associated exclusively with the social dimension. Although this specification makes clear that a two-dimensional model is preferable to a one dimensional one, it seems unrealistic to assume that the economic and social dimensions are orthogonal. To relax this assumption, allowing preferences on these two dimensions to be correlated, we have to implement additional restrictions. To estimate these correlated dimensions, we restrict many of the items to load on only one dimension or the other. Those items that did not clearly load better on one dimension or the other in the independent models were allowed to load on both dimensions. The resulting discrimination parameters are reported in the final columns of the table. 10 In addition to providing a clearer structure which identifies these dimensions as economic and social preferences, these preferences are now allowed to correlate, which they do at a moderate level of 0.30. Reassuringly, we find the individual discrimination parameters look nearly identical with either specification. In the remainder of the analysis, we rely on this correlated two-dimensional latent measure to evaluate the self-reported measures of ideology. 11

dimensions are unchanged by the inclusion of a third dimension. The correlation between economic dimensions with and without the third dimension is 0.979 (0.954 for social dimensions).

^{7.} Indeed, the respondents' preferences in the 1D model match well with the economic preferences in the 2D model (0.962 correlation), but less so with social preferences (0.580).

^{8.} An alternative identifying restriction is to fix individual respondents on the latent dimension. We obtain similar results when normalizing by fixing the positions of three respondents: one extremely liberal on both dimensions [-3, -3], one extremely conservative on both [-3, -3], and one respondent extreme on both, but cross-pressured [-3, -3]. The resulting latent scores correlate with those reported at .995 on the economic dimension and .995 on the social dimension.

^{9.} As a robustness check, we have also estimated a model where every item loaded only on one dimension, with nearly identical results. The resulting latent scores correlate with those reported at .995 on the economic dimension and .993 on the social dimension.

^{10.} We find no evidence that the estimates do not converge. For each set of estimates, 5.5 percent or less of the parameters fail Geweke's diagnostic, an amount, under standard levels of statistical significance, one would expect to randomly occur if all of the parameters converged to the stationary distribution.

^{11.} A comparison of an additive scale created using the issue items available for each respondent finds a correlation of .82 for the economic dimension and .67 on the social dimension. The lower correlation for the social dimension no doubt reflects the greater variability found in the discrimination parameters, again affirming the advantages of the IRT model. Unfortunately, we

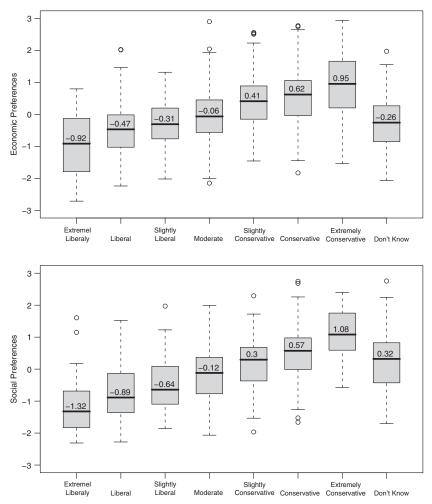


Figure 2. Latent Policy Preferences by Self-Reported Ideology.

Comparing Ideology Measures

We start by separately comparing each latent dimension to the ideological self-placement scale in the postelection survey. In figure 2, we graph the corresponding box plot of estimated latent scores for each response category. ¹² The figure shows a clear relationship between policy attitudes and ideological

cannot create a directly comparable estimate using factor analysis given the pattern of missing data and the discrete nature of some of the variables.

^{12.} In a box plot graph, the box indicates the interquartile range (marking the lower quartile, median, and upperquartile), the whiskers show the range of the data (1.5 times the interquartile range), and circles indicate outliers.

self-placement—with self-identified liberals having more liberal policy preferences on social and economic issues than self-identified conservatives and vice-versa. At the same time, the graph highlights the considerable variability in the policy preferences of each group, especially among self-identified moderates and those answering "don't know." Indeed, the interquartile range (the box) of the moderate respondents overlaps the median value of all but the extreme ideologues, offering the first indication that the moderate label, in particular, covers a wide range of policy attitudes.

The box plot graphs offer other interesting comparisons as well. First, relative to self-identified liberals (of any intensity), self-identified conservatives in the sample have more diverse policy preferences on both dimensions, as evidenced by the longer whiskers. This no doubt reflects the negative connotations associated with the liberal label that has been prevalent in American politics in recent decades. Differences in the social desirability of the ideological labels mean that more people are willing to identify as "conservative" even though they don't necessarily hold the policy preferences associated with the label (Miller 1992). Comparing across dimensions also finds that self-identified liberals and conservatives are more polarized (i.e. further from 0) on the social dimension than on the economic dimension.

Second, we see that the intervals *between* categories are not equal, as is assumed by the 7-point self-placement scale. In particular, there is a much larger gap in the median between those who call themselves "extremely" liberal (conservative), and those who call themselves liberal (conservative) relative to other gaps on the scale. In contrast to the ideological self-placement measure—in which ideological labels can mean different things to different people—our latent measure of policy preferences places all respondents on the same underlying policy scale and provides finer distinctions between individuals.

Finally, we see that those who say "don't know" have a preference distribution quite similar to that of self-identified moderates. Self-reported ideology questions often have rather high levels of DK responses, leaving scholars unsure how to handle the missing data problem. The similarities we see here offer some empirical justification to simply recoding DK to be moderate (rather than omitting them from the analysis), as is common in some research. To be clear, though, the reason the two groups look so similar is that self-identified moderates, like the don't knows, have an equally diverse set of policy preferences. Undoubtedly, both the DK and moderate responses are selected for a variety of reasons, only some of which reflect centrism (for self-identified moderates) or uncertainty (for DK).

The latent measures offer a benchmark for evaluating the various measures of ideology available in the 2000 American National Election Study. Comparing the correlations between each of the ideology questions and the latent measures, shown in table 2, finds that the postelection scale measure outperforms the other two. It is perhaps not surprising that a postelection measure outperforms a preelection measure since people might be better able to

	Latent economic Correlation	Latent social Correlation
Preelection branching ideology	.425	.490
Preelection scale ideology	.478	.523
Postelection scale ideology	.486	.547

Table 2. Comparison of Latent Measures and Self-reported Ideology

NOTE.—Polyserial correlations are reported.

select an appropriate ideological label because of campaign information. But we also find that the preelection scale outperforms the preelection branching question. This result offers some challenge to previous research that concluded that branching measures were preferable to scale measures (Aldrich et al. 1982), but is consistent with other analysis of the 2000 ANES data (Aldrich, Griffin, and McKay 2002). For the remainder of the analysis evaluating ideological identification, we rely on this standard postelection 7-point scale.

Turning to a comparison of the individual-level relationships between the social and economic dimensions, we plot in figure 3 each respondent's social and economic scores for self-reported conservatives, liberals, moderates, and don't knows. ¹³ For those who call themselves liberal or conservative, we see that there is a clear relationship between the latent social and economic dimensions, with respondents clustered in the corresponding conservative or liberal quadrants of the graphs. Thus, the more conservative an individual's preferences on social issues, the more conservative we expect her to be on economic issues, offering evidence of ideological constraint among this subset of the electorate.

In contrast, there is a much weaker relationship between economic and social issue preferences for moderates and DK respondents. For these respondents we see a diffuse cloud of data points and a smaller Beta coefficient. This indicates that individuals who self-identify as moderates are not simply neutral or moderate across political issues, but are often cross-pressured between the economic and social dimension (located in quadrants 2 and 4). Some 44 percent of moderates and 47 percent of DK respondents are in these cross-pressured quadrants. If we define someone as holding "centrist" policy positions if they fall within the middle tercile of both the economic and social latent dimensions, we find that just 17 percent of self-identified moderates have centrist

^{13.} The end categories of the post-election 7-point scale are collapsed so liberals and conservatives include the "extreme" ideologues. Not shown are the "slightly" categories; not surprisingly, the observed relationships for this group fall in between that of ideologues and moderates.

^{14.} The reported Betas are the regression coefficients for the economic dimension regressed onto the social dimension.

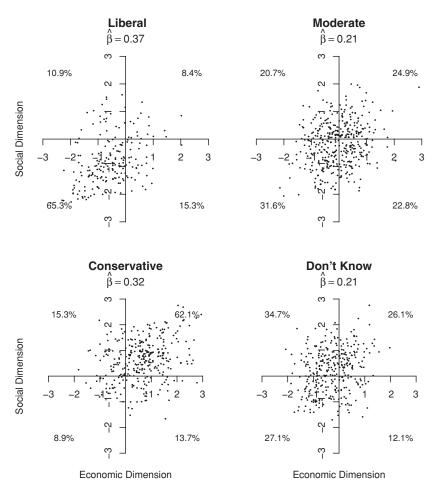


Figure 3. Economic versus Cultural Dimension of Ideology by Self-Reported Ideology. Regression coefficients and percent of observations reported for each category.

preferences.¹⁵ Even expanding the definition of centrist to include respondents with preferences in the 25th to 75th percentile of both dimensions, we still find that only 35 percent of self-identified moderates hold centrist positions on both policy dimensions.

We also find slight asymmetries between liberal and conservative identifiers that again seem to reflect differences in the social desirability of the two

^{15.} Using this same threshold, we find that 59 percent are cross-pressured, either centrist on one dimension and extreme on the other or extreme on both in opposing directions, another 8 percent are misclassified conservatives, and 15 percent are misclassified liberals.

labels. Self-identified liberals have a stronger relationship between the economic and social dimensions on average than do the self-identified conservatives. And slightly more conservatives fall outside their corresponding quadrant (38 percent compared to 35 percent). This pattern is consistent across the various thresholds for the latent dimensions¹⁶, even as the majority of self-identified liberals and conservatives hold policy preferences consistent with their ideological labels across both dimensions. Very few liberals or conservatives are completely misclassified, holding opposing preferences on both dimensions—fewer than 9 percent based on the quadrant classification and fewer than 3 percent based on the tercile classification.

In sum, this descriptive analysis indicates that, even in today's polarized environment, the commonly asked survey question about ideological self-placement is inadequate for capturing the complex belief systems of a sizable portion of the American public. As political commentator Jim Hightower puts it: "Most of us are mavericks, political mutts—each one of us a heady and sometimes hot mix of liberalisms, conservatisms and radicalisms" (Hightower 1997, p. 235). These political mutts often identify as political moderates, making it difficult to interpret the standard measure of ideology.

Predicting Use of Ideological Labels

The descriptive analysis above suggests that self-identified moderates are made up of at least two very different kinds of people—policy centrists and the ideologically cross-pressured. The key alternative perspective, however, is that the observed variation in economic and social preferences simply reflects a lack of political sophistication. To account for this possibility, we estimate a logit model with the appropriate controls predicting an individual's decision to select the Moderate, Ideologue, or DK categories. To avoid arbitrary thresholds, we measure cross-pressured preferences as the product of the economic and social dimensions (multiplied by -1 so that values range from least to most cross-pressured), so that the measure captures the ideological distance between dimensions. We include in the model a measure of political knowledge to account for the possibility that moderate identification simply reflects political ignorance, as hypothesized by Converse (1964).¹⁷ We also control for the potential symbolic aspects of ideological labels with a strength of partisanship measure (partisan versus independent) and the socialization and group identity aspects of ideological labels with demographic controls for race, gender, and age. Finally, we control for policy extremism on the individual economic and social dimensions.

^{16.} For instance, 10 percent of self-identified liberals have preferences in the conservative tercile on at least one dimension, while 12 percent of conservatives have preferences in the liberal tercile on at least one dimension.

^{17.} Following Bartels (1996), we use the interviewer assessment of political knowledge.

The model results are estimated simultaneously with the IRT measures to take into account the measurement error involved in the estimation of our latent measures. ¹⁸ Thus, if we have a lot of uncertainty in our estimate of the economic or social preferences of an individual—perhaps because of skipped questions or a random response pattern—that uncertainty is carried over into the subsequent model estimates. Simply including the latent measure without accounting for the uncertainty in the estimate of that measure—the approach typically used with factor scores from a traditional factor analysis—could result in biased coefficient estimates. In this respect, our approach offers additional reassurance that we are controlling for political knowledge by accounting for the uncertainty in the latent measures (since some individuals are measured with more error than others).

The findings are reported in table 3. Reported are the coefficient estimates and the 90 percent highest posterior density (HPD) intervals. This offers a gauge of "significance" since we can say there is a 90 percent probability that the coefficient lies within the interval. Looking first at some of our political controls, we see that the decision to identify as a political moderate is related to many of the characteristics hypothesized in previous research. Partisans are less likely than independents to identify as moderates, and the more politically knowledgeable are less likely than the politically ignorant to call themselves moderate (and more likely to call themselves moderate than to say "Don't Know"). Even with all of these controls, though, being cross-pressured has a sizable and significant effect on use of the moderate label. There is a 93 percent probability that the cross-pressure coefficient is greater than zero for the Moderate versus Ideologue comparison. 20

To illustrate the substantive impact of policy cross-pressures, we graph in figure 4 a contour plot of predicted probabilities to show the variation in the probability of identifying as a moderate across various levels of economic and social preferences. We see that those most cross-pressured (the darker areas in the image) have a higher elevation or probability of calling themselves moderate.²¹ Individuals who are the least cross-pressured (most ideologically extreme on both dimensions) have just a 10 percent chance of calling themselves ideological moderate, compared to a 25 percent chance among those with

^{18.} The simultaneous estimation is implemented by imposing a standard multinomial logit model for self-placement as an ideologue, moderate, or DK alongside the measurement model (with parameters θ), assuming vague normal priors on the logit coefficients (labeled γ). The MCMC chain then updates the estimates of γ , given the previous estimates of θ , and θ is updated given the previous estimates of γ .

^{19.} By contrast, with standard (frequentist) confidence intervals, we know only that 90 percent of the time the interval contains the true value; there is no indication of how likely a set of values are. 20. There is an 89 percent probability that the coefficient is greater than zero for the DK v. Ideologue comparison.

^{21.} Estimates are made holding variables at their mean category or mode for indicator variables.

Table 3. Predicting Ideological Self-Placement

		All respondents		X	Knowledgeable respondents	S
	Moderate versus Ideologue	Don't Know versus Ideologue	Moderate versus Don't Know	Moderate versus Ideologue	Don't Know versus Ideologue	Don't Know versus Moderate
Intercept	1.29	2.09	-0.81 [-1.63, 0.09]	0.88	-0.85 [-1.88, 0.27]	1.73
Age	0.0074	0.017	-0.009	0.006	0.019	-0.013
Female	-0.14 -0.38, 0.101	$\begin{bmatrix} 0.305, 0.325 \end{bmatrix}$ 0.17 [-0.12, 0.45]	$\begin{bmatrix} 0.010, 0.0001 \\ -0.01 \end{bmatrix}$		[0.003, 0.20] 0.34 [-0.03, 0.70]	-0.42 -0.80 -0.027
Nonwhite	0.0015 0.034 0.401	0.92	$\begin{bmatrix} -0.90 \\ -1.31 \\ -0.48 \end{bmatrix}$	$\begin{bmatrix} 0.00, 0.05 \end{bmatrix}$	0.94 0.94 0.49, 1.391	-0.76 -1.25 -0.25
South	$\begin{bmatrix} 0.000, 0.0000, 0.000, 0.000, 0.000, 0.000, 0.0000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.0$	0.28	-0.39 -0.71, -0.0551	-0.15 -0.46, 0.13	0.48	[-1.02, -0.23]
Income	-0.017 [-0.05.0.017]	-0.11 $[-0.15, -0.05]$	0.09	-0.023 $[-0.06, 0.016]$	-0.22 $[-0.29, -0.15]$	0.19
Partisan	-0.88 [-1.11, -0.61]	$\begin{bmatrix} -0.57 \\ -0.57 \end{bmatrix}$	-0.30 -0.61, 0.031	-0.94 [-1.22, -0.68]	-0.49 -0.860.10]	[-0.86, -0.04]
Political knowledge	$\begin{bmatrix} -0.17 \\ -0.29, -0.05 \end{bmatrix}$	$\begin{bmatrix} -1.02 \\ -1.18, -0.87 \end{bmatrix}$	0.85			
Economic extremism	$\begin{bmatrix} -0.81 \\ [-1.20, -0.44] \end{bmatrix}$	-0.21 [-0.61, 0.20]	-0.60 $[-1.11, -0.10]$	-1.00 [-1.41, -0.53]	-0.29 [-0.81, 0.19]	-0.71 [-1.29, -0.08]
Social extremism	$\begin{bmatrix} -0.60 \\ -1.02, -0.22 \end{bmatrix}$	0.06 [_0.42, 0.32]	$\begin{bmatrix} -0.54 \\ -1.00, -0.03 \end{bmatrix}$	-0.62 [-1.05, -0.16]	-0.44 [-0.95, 0.08]	$\begin{bmatrix} -0.18 \\ -0.77, 0.44 \end{bmatrix}$
Cross-pressure	0.23	0.16	0.07	0.19	0.26 $1-0.02, 0.571$	-0.071 [-0.45, 0.31]
20		1,298			1,008	
Correctly predicted		0.618 $[0.605, 0.632]$			0.645 [0.630, 0.622]	
Naive (by mode) Proportional Reduction of error		0.556 0.111 [0.087, 0.136]			0.626 0.031 [0.0063, 0.057]	

NOTE.—Entries are coefficients, 90% Highest Posterior Density (HPD) intervals in brackets.

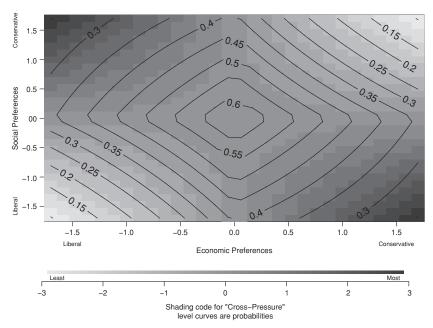


Figure 4. Predicted Probability of Identifying as a Moderate.

the greatest ideological distance between their economic and social policy preferences (97.5th percentile of cross-pressures measure).²²

As an additional robustness check, we have estimated the model only for the politically knowledgeable respondents (rather than simply controlling for them in the models), and find nearly identical results. Thus, even accounting for symbolic considerations, political knowledge, and policy centrism, individuals with divergent economic and social preferences are more likely to call themselves moderate than to use a liberal or conservative label. This finding offers an important corrective to recent characterizations of the American public as being either centrist *or* polarized. The reality is that the belief systems of the mass public are more complex—and the label of ideological moderate so often used to describe the American public represents a diverse set of policy attitudes.

Implications

The finding that the moderate label masks differences between policy centrists and cross-pressured respondents has consequences for our theories and models

22. Examining changes in the predicted probabilities across varying levels of values for all three variables still finds that the individuals are most likely to identify as a moderate when they are centrist on both dimensions or when they are cross-pressured between them.

of political behavior. Ideologically moderate voters, after all, are often at the heart of theories of electoral democracy. The classic median voter theorem, for instance, predicts that moderates are the pivotal voters in the election, inducing politicians to advocate centrist public policies (Downs 1957). Moderates are also considered the all-important swing voters willing to change candidate support across or within elections and, as such, hold the balance of power in national elections (Converse 1964). Following the 2006 midterm election, for example, one analyst concluded: "the outcome of this election—and others in our recent history—was determined by the shifting sentiments of Independents and moderates."²³ There is a clear tendency for scholars and journalists to treat political moderates as a homogeneous group, painting broad strokes about their attitudes and behavior. Yet, our analysis documents important heterogeneity in the policy preferences of moderates that could well influence conclusions about their voting behavior.

We evaluate this possibility empirically by comparing predictions across vote choice models that either include or exclude the latent ideology scores, while controlling for ideological self-placement.²⁴ As we see in figure 5, we can get widely different predictions about the behavior of self-identified moderates. The graph plots the estimated error in individual predictions if we treat moderates as homogeneous in their policy preferences. Across different combinations of economic and social preferences, we find that an individual's predicted probability of voting for Bush can be off by as much as 38 percentage points. In contrast, predictions are off by no more than 7 percentage points for liberals (not statistically significant) and 13 percentage points for conservatives (rarely changing predicted candidate choice). Consequently, while the standard self-placement scale may be adequate in summarizing the preferences of liberals and conservatives and predicting their political behavior, it performs quite poorly for self-identified moderates.

Beyond the example above, the complex contours of policy attitudes that we have identified may have a variety of consequences for studies of electoral dynamics. A more complete understanding of the structure and meaning of ideological identification could well change our expectations and conclusions about split ticket voting, political engagement, and campaign effects. Moreover, recognizing the distinction between policy centrists and the ideologically cross-pressured might affect our basic theories about candidate behavior, since centrists and cross-pressured respondents may be responsive to very different campaign strategies (Hillygus and Shields 2008).

^{23.} Andrew Kohut, "The Real Message of the Midterms," *Pew Center Report* November 14, 2006. 24. The logit model is again estimated simultaneously with IRT measures and includes party identification, age, gender, race, income, and an indicator for the South. Predicted probabilities are calculated holding all other variables at their means or modes. The full set of coefficients are available in an online appendix on the POQ website. The results do not change when the liberal conservative scale is replaced by dummy variables.

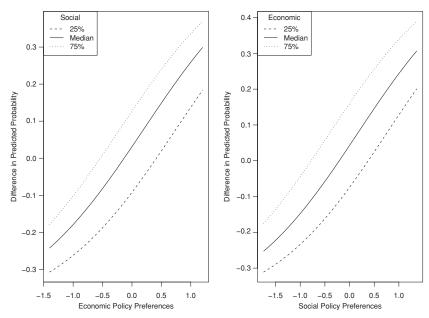


Figure 5. Error in the Predicted Probability of a Bush Vote.

Discussion

Given the current polarized nature of American politics, renewed attention has been focused on the ideological preferences of the mass public. Yet, the way we conceptualize and measure those preferences shapes our conclusions about their distribution and influence.

Our analysis documents the multidimensional nature of policy preferences in the American electorate, and finds a noteworthy number in the public are liberal on one dimension and conservative on another. Because these cross-pressured individuals tend to call themselves moderate (or say DK), it undermines interpretation of the standard 7-point ideological identification scale so often used in political research. Thus, even as scholars find that ideological labels are more meaningful than ever before, those labels are accurate representations of policy preferences only for those self-identifying as a liberal or conservative.

We are by no means the first to acknowledge that ideological self-placement is a flawed measure because of mismatches between ideological identification and policy preferences. But in contrast to early research, we cannot attribute the disconnect between self-reported ideology and issue attitudes to the lack of political knowledge alone. Rather, many people are coherent along the economic and social dimension separately, but are simply cross-pressured between them.

Our results show that failing to account for the multidimensional nature of ideological preferences can produce inaccurate predictions of voting behavior

for the plurality of Americans who do not call themselves liberal or conservative. As such, we recommend that future research use distinct measures of social and economic preferences in empirical models of mass behavior. Since the standard approach to measuring ideology has been to ask about identification along a unidimensional scale, it would be particularly fruitful for scholars to explore the potential for including direct measures of preferences across multiple ideological dimensions as an alternative to creating issue-based measures used here (see Hooghe, Marks, and Wilson 2002 for example with European elites). Until a set of valid and reliable survey questions are identified, researchers should include a large and diverse set of policy items on their survey questionnaires so that issue-based scales can be created.

To be sure, our findings do not imply that the ideological self-placement measure should never be used. Scholars have long noted the symbolic importance of liberal and conservative labels (Stimson 2004), and our results suggest that these labels are meaningful representations of policy preferences for self-identified liberals and conservatives. However, researchers should at least operationalize ideological self-placement as a series of dummy variables in their empirical models since the measure cannot be assumed to be an ordinal scale with political moderates in the middle. And even then, this approach cannot distinguish between so-called moderates who are centrist and those who are cross-pressured, making it inadequate for any theory or model that is dependent on a measure of policy centrism.

Beyond these practical implications, these findings are relevant to the ongoing polarization debate. On one side are those who say that political moderates have either followed political elites to the ideological extremes or, frustrated by the polarized environment, have dropped out of the political process altogether (Abramowitz and Saunders 1998, 2005; Layman and Carsey 2002). On the other side are those who contend that the majority of Americans have remained ideologically centrist even as political elites have grown more polarized (Dimaggio, Evans, and Bryson 1996; Fiorina 2004). It turns out that neither portrait of the American moderate is entirely accurate. Our findings make clear that the American public is not as ideologically extreme as often portrayed, but nor are they truly centrist. And the heterogeneous political complexion of the American public has consequences for the way we measure political ideology and the way we use it in our theories and models of political behavior.

Appendix

2000 AMERICAN NATIONAL ELECTION STUDY

The 2000 ANES was conducted by the Center for Political Studies of the Institute for Social Research. The preelection survey was conducted from September 5 to November 6, and the postelection re-interview ran from

November 8 to December 18. The study population was all U.S. citizens of voting age living in the forty-eight contiguous states. The sampling design was a dual frame sample that included both a traditional area probability sampling using face-to-face (FTF) interviews (1,006 pre respondents) as well as a RDD stratified equal probability sample interviewed by telephone (801 prerespondents). The response rates, calculated as the ratio of completed interviews to the total number of potential respondents, were 64.8 percent for FTF and 57.2 percent for phone for preelection and 57.2 percent for FTF and 85.8 percent for phone for postelection. More details about the methodology are available at http://www.electionstudies.org/studypages/2000prepost/2000prepost.htm.

QUESTION WORDING

All variables were recoded to run from liberal to conservative. Question wording for model controls are available in an online appendix on the POQ website.

self-placement measures: Liberal-Conservative Ideological Scale (V001368/V000440/VCF0803) [FTF]: "Where would you place yourself on this scale, or haven't you thought much about this? Scale: (1) extremely liberal, (2) liberal, (3) slightly liberal, (4) moderate; middle of the road, (5) slightly conservative, (6) conservative, (7) extremely conservative." [phone]: "When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, extremely conservative, or haven't you thought much about this?"; Liberal-Conservative Branching Measure (V000446) (FTF and phone): "When it comes to politics, do you usually think of yourself as a liberal, a conservative, a moderate, or haven't you thought much about this? If you had to choose, would you consider yourself a liberal or a conservative? Would you call yourself a strong liberal or a not very strong liberal? Would you call yourself a strong conservative or a not very strong conservative?"

Issue questions: V000748: "Do you think gay or lesbian couples, in other words, homosexual couples, should be legally permitted to adopt children?"; V000545: [FTF] "Where would you place yourself on this scale, or haven't you thought much about this? (1–7 scale) 1 govt should provide many fewer services, 7 govt should provide many more services"; V000549: [phone] "Which is closer to the way you feel or haven't you thought much about this? Should the government reduce/increase services and spending a great deal or (reduce/increase services and spending) only some."; V000609: [FTF] "Where would you place yourself on this scale, or haven't you thought much about this? 1–7 scale, 1 govt insurance plan, 7 private insurance plan"; V000610: [phone] "Which is closer to the way you feel or haven't you thought much about this? do you feel strongly or not strongly that there should be a government insurance plan?/do you feel strongly or not strongly that individuals

should pay through private insurance plan?"; V000615: [FTF] "Where would you place yourself on this scale, or haven't you thought much about this? 1–7 scale: 1. govt should see to jobs and standard of living 7. govt should let each person get ahead on own."; V000619: [phone] "Which is closer to the way you feel or haven't you thought much about this? Do you feel strongly that the government should see to it that every person has a job and a good standard of living, or not so strongly? Do you feel strongly that the government should just let each person get ahead on their own, or not so strongly?"; V000674a: [standard version] "Some people think that if a company has a history of discriminating against blacks when making hiring decisions, then they should be required to have an affirmative action program that gives blacks preference in hiring. What do you think? Should companies that have discriminated against blacks have to have an affirmative action program? [EXPERIMENTAL VER-SION] Some people think that if a company has a history of discriminating against blacks when making hiring decisions, then they should be required to have an affirmative action program that gives blacks preference in hiring. What do you think? Should companies that have discriminated against blacks have to have an affirmative action program or should companies not have to have an affirmative action program? [BOTH VERSIONS] Do you feel strongly or not strongly (that they should not have to have affirmative action)?"; V000676: "Should federal spending on welfare programs be increased, decreased, or kept about the same?"; V000680: "Should federal spending on aid to poor people be increased, decreased, or kept about the same?"; V000681: "Should federal spending on social security be increased, decreased, or kept about the same?"; V000683: "Should federal spending on public schools be increased, decreased, or kept about the same?"; V000690: "Some people have proposed that most of the expected federal budget surplus should be used to cut taxes. Do you approve or disapprove of this proposal? Do you approve of this proposal strongly or not strongly? Do you disapprove of this proposal strongly or not strongly?"; V000694: [FTF] "There has been some discussion about abortion during recent years. Which one of the opinions on this page best agrees with your view? You can just tell me the number of the opinion you choose. [PHONE] There has been some discussion about abortion during recent years. I am going to read you a short list of opinions. Please tell me which one of the opinions best agrees with your view? You can just tell me the number of the opinion you choose. options: (1) by law, abortion should never be permitted. (2) the law should permit abortion only in case of rape, incest or when the woman's life is in danger. (3) the law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established. (4) by law, a woman should always be able to obtain an abortion as a matter of personal choice."; V000702: "Would you favor or oppose a law in your state that would require a teenage girl under age 18 to receive her parent's permission before she could obtain an abortion? Strongly or not strongly?"; V000705: "There has been discussion recently about a proposed law to ban

certain types of late-term abortions, sometimes called partial birth abortions. Do you favor or oppose a law that would make these types of abortions illegal? Do you strongly or not strongly favor/oppose a law that would that would make these types of abortions illegal?; V000727: "Do you think homosexuals should be allowed to serve in the United States Armed Forces or don't you think so? Do you feel strongly or not strongly that homosexuals should be allowed to serve? Do you feel strongly or not strongly that homosexuals should not be allowed to serve?"; V000731: "Do you think the federal government should make it more difficult for people to buy a gun than it is now, make it easier for people to buy a gun, or keep these rules about the same as they are now? A lot easier/more difficult or somewhat easier/more difficult?"; V000752: "Do you favor or oppose the death penalty for persons convicted of murder? (Do you favor/oppose the death penalty for persons convicted of murder) strongly or not strongly?"; V000755: [FTF standard] "Where would you place yourself on this scale, or haven't you thought much about this? [FTF experimental] where would you place yourself on this scale? 1–7 scale: 1. women and men should have equal roles, 7. a woman's place is in the home."; V000759: [phone version 1] "Which is closer to the way you feel, or haven't you thought much about this? [phone version 2] which is closer to the way you feel? [both phone versions] Do you feel strongly or not strongly that men and women should have equal roles? Do you feel strongly or not strongly that a woman's place is in the home?"; V000771: [FTF] "Where would you place yourself on this scale, or haven't you thought much about this? 1–7 scale: 1. tougher regulations on business needed to protect environment, 7. regulations to protect environment already too much a burden on business."; V000775: [Phone] "Which is closer to the way you feel, or haven't you thought much about this? Do we need to toughen regulations to protect the environment a lot, or just somewhat? Are regulations to protect the environment way too much of a burden on business or just somewhat of a burden?"

Supplementary Data

Supplementary data are available online at http://poq.oxfordjournals.org/

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