

Unmasking mixed views: Survey experiments on multi-dimensional framing of self-described ideology

Mike Mokrzycki, independent consultant/University of Massachusetts Lowell

Francis Talty, University of Massachusetts Lowell

Jordon Peugh, GfK/Knowledge Networks

Stephanie Jwo, GfK/Knowledge Networks

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Abstract

Public opinion surveys frequently ask respondents to self-identify ideologically along a single continuum as liberal, moderate or conservative on political matters generally. Recent research has found that while indeed many individuals consider themselves moderate across multiple policy dimensions, there also are substantial numbers who hold liberal views on some dimensions and conservative views on others, which raises questions about the validity of generic ideology measures that allow for no such distinction (Treier and Hillygus, 2009). We test this conclusion and attempt to learn more about relationships among different ideological attitudes through simple split-half experiments comparing single-dimension and multi-dimensional ideology measures. In probability-based samples of four different populations – national adults, Massachusetts registered voters, and 2012 Republican presidential primary voters in New Hampshire and Ohio – we consistently find substantial numbers of individuals are cross-pressured. At the extremes, most frequently this involves respondents self-describing as liberal on social issues and conservative on fiscal issues (only rarely the other way around). More often, respondents call themselves liberal or conservative on one dimension and moderate on another – substantially outnumbering what might be regarded as true centrists, those who identify as moderate on both social and fiscal dimensions. Furthermore, we find evidence that the general conservative and liberal labels, far from being monolithic, also may conceal mixed policy preferences. Implications for analysis of American voting behavior will be discussed.

The authors wish to thank D. Sunshine Hillygus for her insights as we designed the study reported here, as well as the institutions whose surveys were platforms for this experiment. Historical ideology question wordings and results from other sources were obtained from searches of the iPOLL databank of the Roper Center for Public Opinion Research, University of Connecticut.

Correspondence to Mike Mokrzycki, mike@mjmsurvey.com

Introduction: Measuring Ideological Dimensions

“In politics, do you regard yourself as a radical, a liberal, or a conservative?” That Gallup Poll question from April 1937 is the first measure of Americans’ self-described ideology archived in the Roper iPOLL survey database. (Gallup 1937).¹ In the intervening 75 years of public opinion polling the response scale for this type of measurement certainly has seen many other variations – Gallup last used the “radical” category in 1939 (though it resurfaced in several other organizations’ surveys in the early 1970s). Meanwhile, “middle-of-the-road” or “moderate” first appeared in the mid-1960s and became a midpoint for ideology scales in the 1970s, which is when self-described ideology first began to be measured regularly in public opinion research (Robinson and Fleishman 1988). The construct also has been measured through myriad prisms such as “in politics today,” “in your political beliefs” or simply “in general” (hereinafter we’ll call these “generic” ideology questions).

Self-described ideology measures in American surveys to this day nearly always are framed in terms of a single dimension intended to be all-encompassing. Respondents typically are expected to say where, overall, they see themselves along one ideological line connecting extremes from “liberal” to “conservative” (with or without intensity measures for anchors at each end, e.g. the modifier “very” or sometimes even “extremely”). Survey researchers are not alone among social scientists in mostly hewing to a uni-dimensional approach in studying the contours and impact of ideology in American society; political scientists, sociologists and psychologists also have tended largely toward viewing the construct along a single line, in essence from left to right. At the same time, scholars also vary widely in how they define and interpret this construct, and have extensively debated whether only elites or the broader public is capable of thinking and making political decisions within an ideological framework.

As American politicians and other political elites appear to have become more polarized over time, the question arises whether the same is true of the American public – and that begs a comparison of how researchers operationalize and measure ideology and how the American

¹ 3% self-identified as radical, 40% liberal, 37% conservative and 20% no opinion, according to Roper iPOLL. The Gallup Organization conducted approximately 1,500 personal interviews with adults nationwide April 1-6, 1937.

people conceptualize it (Treier and Hillygus 2009). Using Bayesian Item Response Theory (IRT) to analyze a battery of 23 questions about policy preferences in the 2000 American National Election Study, Treier and Hillygus find that the mass public's belief systems are multidimensional, and that failing to account for this can produce inaccurate predictions of voting behavior for the plurality of Americans who call themselves neither liberal nor conservative in a single-dimension measure.

In public opinion research there have been occasional exceptions in which national surveys asked separate questions on ideology on social and economic or fiscal matters, most notably the Los Angeles Times in 1978 and Gallup on an annual basis since 2001. In many of these cases a generic ideology question also was asked in the same instrument. But Roper iPOLL yields no examples of a split-form experiment of the kind conducted for the present study, in which one condition asked only a generic ideology question and the other contained a social/fiscal ideology question pair, thereby avoiding possible confounds from question order interactions between each approach.

We repeat such an experiment in four surveys and find consistent patterns in the results despite substantial differences in target populations, sampling frames, interviewing modes and other methodological details. These data allow construction of a multi-dimensional ideological scale – although not insignificant numbers of unambiguously “cross-pressured” individuals (liberal on one dimension, conservative on the other) find no logical home within that spectrum. The results buttress and perhaps extend the major findings of Treier and Hillygus, as we find not just that “moderate” masks mixed beliefs but the generic “conservative” and “liberal” labels also may do so in a substantial number of cases.

Context: Interpreting Ideology

Anthony Downs' seminal work “An Economic Theory of Democracy” (1957) described ideology as an internally consistent set of principles that inform a “good society”; as his title suggests, Downs' analysis centered on people's views about the extent of government

intervention in the economy, from total government control to total absence of a government role - points on a straight line connecting extremes of a left-right ideological continuum. Indeed this bi-polar or dualist view can be traced to pre-Downs 1950's work by Duverger, who proffered: "Throughout history, all the great factional conflicts have been dualist.... Whenever public opinion is squarely faced with great fundamental problems it tends to crystallize round two opposed poles." (1951, 216)

In another classic work, Converse (1964) posited that there is a dramatic gap in political information grasped by elites compared to less educated individuals, and that people's positions on issues affect their overall belief systems, but relative salience of issues varies by individual. Earlier studies (e.g. McClosky 1958, Campbell et al 1960) also "dismissed the public's ability to use the ideological labels of liberal and conservative in structuring their political thoughts, as well as in evaluating issues and candidates" (Luttbeg and Gant 1985). The supposition that ideology was absent in mass American politics drew controversy among students of political behavior, with opposing views include Nie and Anderson (1974), who argued that ideology was indeed a factor not only for elites. Levitin and Miller (1979) found that only the best educated understand the ideological implications of policy preferences, but despite having little comprehension of any ideological meaning, people use labels like conservative and liberal to help make sense of the remote world of politics – and that those labels strongly correlated to voting in the 1972 and 1976 presidential elections. In other words, ideology mattered, even if sometimes only vaguely understood.

Some studies of political ideology analyzed survey responses on multiple issues and grouped them according to multiple dimensions, though domestic vs. international rather than social vs. economic (Kritzer 1978, Smith 1990). Social issues such as abortion, equal rights for women and marijuana use saw rising prominence in American discourse in the 1960s and 1970s; research on ideology in this environment not surprisingly raised the question for researchers whether the now established uni-dimensional liberal-conservative continuum was capturing these changing social beliefs and ideological positions. Conover and Feldman (1981) published one of the first examinations of ideology that questioned the linear bi-polar model and suggested simultaneous analysis of economic (in the Downsian model) and social dimensions. They observed that some

people may define ideology from a purely economic perspective, while others may do so from a purely social perspective, seeing economic issues like taxes through a social impact lens, for example. Yet Conover and Feldman also discerned that symbols (such as capitalism), group affiliations and parental socialization had more to do with one's ideology than particular policy preferences.

In the survey research realm, as noted, the 1970s saw the first systematic use of generic ideology questions, beginning with the American National Election Study in 1972 and General Social Survey in 1974. But there was little exploration of potential differences in ideological beliefs along social vs. economic lines. The first example we could find in Roper iPOLL of a survey that explicitly framed ideology this way was a 1978 national Los Angeles Times poll. It tested views on social matters (with a lengthy introduction that explicitly mentioned typical policy positions of people who are liberal or conservative “in their lifestyles” toward issues such as affirmative action, women's liberation, marijuana, the death penalty, abortion and homosexuality) and economic matters (which mentioned issues such as federal programs on poverty and unemployment, business vs. labor, and government planning vs. free enterprise). Much later in the survey the Times asked a generic question on “views on most political matters” (Los Angeles Times 1978). This survey found fairly little difference in the distribution of ideological belief no matter how the question was asked² – and at least from the data available in Roper iPOLL, it would be two decades before polls of the national general population tried anything similar again.

As noted, the Gallup Organization has since 2001 conducted an annual survey in which it asks Americans to define their ideology separately on “economic” and “social” issues (with no examples of those issues given). Gallup finds that in recent years – since the financial crisis of 2008 – there has been an increase in the share of Americans who call themselves conservative on economic issues. On social issues Gallup finds a decline in the percentage of social moderates since 2005, with the difference split pretty equally between increases in social liberals and social conservatives (Jones 2012).

² On “economic matters”: 19% liberal, 32% middle-of-the-road, 48% conservative;
On “social issues”: 22% liberal, 27% middle-of-the-road, 48% conservative;
On “most political matters”: 21% liberal, 34% middle of the road, 42% conservative.

Related to the analysis of ideology is the question of political polarization. There appears to be consensus that American politicians and other political elites have become more polarized in the past several decades – and because these days these elites tend to take consistent ideological sides across varied policy domains, a single dimension of ideology is seen as sufficient to capture the belief systems of today’s political elites (Treier and Hillygus 2009). One recent study finds that in the U.S. House and Senate, polarization is now at a post-Reconstruction high; this conclusion is based on roll call votes in which “the primary dimension is the basic issue of the role of the government in the economy, in modern terms liberal-moderate-conservative” – again, in essence a Downsian model (Poole and Rosenthal 2012).

Whether the American public is similarly more polarized has been the subject of considerable debate in research since the mid-1990s. A new Pew Research Center study, based on 48 political values measures Pew has tracked since 1987, concludes that Americans’ “values and basic beliefs are more polarized along partisan lines than at any point in the past 25 years,” with Republicans “most distinguished by their increasingly minimalist views about the role of government and lack of support for environmentalism” while “Democrats have become more socially liberal and secular.” At the same time, Pew reported, “Despite electoral swings in recent elections, the fundamental ideological breakdown of the American public has shifted little in recent years,” with conservatives and moderates each comprising a little more than a third of American adults and liberals totaling about one-fifth (Pew Research Center 2012). (The increasing polarization between the Democratic and Republican parties is not incompatible with Pew’s reporting of overall ideological stability because declining numbers of Americans affiliate with those parties. Pew, analyzing data back to Gallup in the 1930s, concludes that “it is safe to say there are more political independents in 2012 than at any point in the last 75 years.”)

With 48 values variables to analyze, the Pew study is able to provide detailed, nuanced analysis of Americans’ political views. Few other public opinion surveys have that luxury, and most lean heavily on just a single-dimension ideology measure. Treier and Hillygus find shortcomings in the uni-dimensional approach and our work does too.

Treier and Hillygus recommended that future research use “distinct measures of social and economic preferences in empirical models of mass behavior” and in particular to investigate use of “direct measures of preferences across multiple dimensions as an alternative to creating issue-based measures used here.” The authors also recommended researchers include “a large and diverse set of policy items” on survey questionnaires to create issue-based scales and test the validity and reliability of new direct measures being developed.

In the surveys that comprise the present study, there was limited room for such policy questions, and analysis of the small number of such questions that were asked is beyond the scope of this paper. The measures we do test allow, however, for analysis of the distribution of multiple populations across a multi-dimensional ideological spectrum – as well as a small but not trivial share of voters who are the most cross-pressured, with liberal views on one dimension and a conservative outlook on the other.

Experiment Design and Survey Methods

The Treier and Hillygus study evaluated relationships between policy attitudes and self-identified ideology by sophisticated application of Bayesian Item Response Theory (IRT) to a battery of 23 questions in the 2000 American National Election Study, covering a wide range of policies that might help inform or be informed by an individual’s broader world view. In the present study we employ an admittedly much simpler operationalization of ideology constructs, drawn in substantial part from the findings of Treier and Hillygus and applied in a logistically efficient manner so as to be adaptable more readily to the constraints of typical news and public affairs polling on American politics.

In all four surveys in our study we conducted split-form experiments in which part of the sample was administered a generic ideology question and the rest got two questions, one each on social and fiscal issues. The wordings – and, for the telephone and web survey instruments,

programming instructions – were as follows (no rotation of question or response order was employed on the paper questionnaire instruments in the exit polls³):

MASSACHUSETTS – TELEPHONE – FORM A

In general, would you describe your political views as: **[REVERSE ORDER HALF SAMPLE]** liberal, moderate, conservative

MASSACHUSETTS – TELEPHONE – FORM B

[ROTATE]

On fiscal issues such as taxes and spending, in general would you describe your views as: **[REVERSE ORDER HALF SAMPLE]** liberal, moderate, conservative

On social issues such as gay marriage and abortion, in general would you describe your views as: **[REVERSE ORDER HALF SAMPLE]** liberal, moderate, conservative⁴

NATIONAL – WEB SURVEY – FORM A

In general, would you describe your political views as:

[REVERSE ORDER HALF SAMPLE]

- Very liberal
- Somewhat liberal
- Moderate
- Somewhat conservative
- Very conservative

NATIONAL – WEB SURVEY – FORM B

³ Even though the exit polls were in Republican primaries, the response categories were ordered from liberal to conservative rather than the reverse. This was for consistency for trend purposes with past practice, including in years when exit polling was conducting in Democratic and Republican primaries at the same time.

⁴ As per usual practice in contemporary news and public affairs polling, our question wordings did not offer an explicit “don’t know” option, although that response was accepted voluntarily (and offered infrequently). This is unlike the 7-point ideology scale in the American National Election Studies that was part of the Treier and Hillygus analysis. Thus we cannot offer evidence regarding the finding that the don’t-know response to the generic ANES ideology question has been declining in recent years, with a corresponding increase in self-described moderates.

In general, how would you describe your views on:

[REVERSE ORDER HALF SAMPLE]

Very liberal	Somewhat liberal	Moderate	Somewhat conservative	Very conservative
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[ROTATE]

Social issues such as gay marriage and abortion

Fiscal issues such as taxes and spending

EXIT POLL QUESTIONNAIRE VERSIONS 1 and 2

[R] On most political matters, do you consider yourself:

- 1 Very liberal
- 2 Somewhat liberal
- 3 Moderate
- 4 Somewhat conservative
- 5 Very conservative

EXIT POLL QUESTIONNAIRE VERSION 3

[P] On social issues such as gay marriage and abortion, do you consider yourself:

- 1 Very liberal
- 2 Somewhat liberal
- 3 Moderate
- 4 Somewhat conservative
- 5 Very conservative

[Q] On fiscal issues such as taxes and spending, do you consider yourself:

- 1 Very liberal
- 2 Somewhat liberal
- 3 Moderate
- 4 Somewhat conservative
- 5 Very conservative

The issues cited as examples in these question wordings were chosen upon analysis of the discrimination parameters Treier and Hillygus reported in Table 1 of their 2009 study, further informed by current political discourse. Among economic issues, several items related to government spending loaded strongly; and taxes and the federal deficit are highly salient in American politics today. Similarly, issues related to homosexuality and abortion loaded strongly on the social dimension in the Treier and Hillygus analysis, and gay marriage and abortion are highly topical in American politics. Our assumption is that such salient issues would serve as effective cues to help the respondent understand the intent of questions asking about ideology related to “social” and “fiscal” issues. Of course it also is possible that respondents’ ideological self-descriptions may have varied if different cues had been used – for example, contraception instead of abortion as an example of a social issue – and this is an area ripe for further research.

The experiment was fielded in the following four surveys:

1. UMass Lowell - Sept 22-28, 2011: Massachusetts U.S. Senate race
 - Split half, N=1000 registered voters statewide, dual-frame overlapping RDD
 - Field: Princeton Survey Research Associates International⁵

2. UMass Lowell – Oct. 28-Nov. 1, 2011: National. Topic: Occupy/Tea Party movements
 - Split half, N=1005 adults nationwide (including 833 registered voters) in online survey from probability-based panel
 - Field: Knowledge Networks (now GfK)⁶

⁵ PSRAI reported the response rate 24 percent for the landline sample and 21 percent for the cellular samples; PSRAI said its “disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.” See methodology statement at http://www.uml.edu/docs/UML-MA-RV-Methodology-2011-09-28_tcm18-37716.pdf

⁶ The survey was conducted using the web-enabled KnowledgePanel®, a probability-based panel designed to be representative of the U.S. population. Initially, participants are chosen scientifically by a random selection of telephone numbers and residential addresses. Persons in selected households are invited by telephone or by mail to participate in the web panel. For those who agree to participate but do not already have Internet access, Knowledge Networks (now GfK) provides at no cost a laptop and ISP connection. Panelists are sent emails inviting them to participate in research. Knowledge Networks reported the cumulative response rate – including the household recruitment rate for its KnowledgePanel, the household profile rate and the survey

3. National Election Pool – Jan. 10, 2012: New Hampshire Republican primary exit poll
 - Split sample: 2/3 generic Q, 1/3 experimental treatment
 - N=2760 (including 855 for experimental treatment); voters interviewed in person as they left voting booths; self-administered paper-and-pencil instrument (PAPI)
 - Field: Edison Research⁷

4. National Election Pool – March 6, 2012: Ohio Republican primary exit poll
 - Split sample: 2/3 generic Q, 1/3 experimental treatment
 - N=2728 (including 892 for experimental treatment); in-person self-administered PAPI exit poll plus phone poll for early/absentee voters
 - Field: Edison Research⁸

Data analysis

As the previous section makes clear, these studies spanned four very different sample populations: Massachusetts registered voters; the U.S. general population (although below we present results for U.S. registered voters when we're comparing them to Massachusetts registered voters); and 2012 Republican presidential primary voters in New Hampshire and Ohio, electorates that differed substantially from each other. These studies also employed widely differing methodologies. Despite these substantial differences, some consistent patterns emerged.

First, to put these findings in broad context, we present the response distributions to the general, social and fiscal ideological measures for the Massachusetts and national surveys.

completion rate – was 5.2%. See methodology statement at http://www.uml.edu/docs/UML-OWS-KNmethodology_tcm18-38520.pdf, which notes that differences between one-time RDD telephone samples and panel studies “make directly comparing response rates between one-time surveys and Panel surveys difficult and perhaps not illuminating.”

⁷ Edison Research reported a statewide completion rate of 37% of all voters randomly approached at the sampled exit poll precincts on the day of the New Hampshire primary.

⁸ Edison Research reported a statewide completion rate of 35% of all voters randomly approached at the sampled exit poll precincts on the day of the Ohio primary.

In Massachusetts, as seen in Table 1, pluralities of registered voters called themselves moderate in general and liberal on social issues, while about as many were conservative as moderate on fiscal issues. Also, there were about equal numbers of self-described conservatives and liberals in general, while liberals outnumbered conservatives by 2-to-1 on social issues and the reverse was the case on fiscal issues.

Table 1. Survey of Massachusetts registered voters, Sept. 22-28, 2011

	In general (Form A)	Social issues (Form B)	Fiscal issues (Form B)
Conservative	26%	22%	37%
Moderate	43%	28%	43%
Liberal	27%	45%	16%

Massachusetts long has been one of the most Democratic states in the nation so it is not surprising that in general and on social issues, larger proportions of registered voters called themselves conservative than did so in Massachusetts. However, there were no significant differences in the distribution of responses on the fiscal ideology measure in Massachusetts and nationally. As shown in Table 2, nationally, conservatives outnumbered liberals by a 3-to-2 margin on the general measure, though here too a plurality were moderate. On social issues, respondents split pretty evenly among the three ideological categories. And on fiscal issues, there were about equal numbers of conservatives and moderates – four in 10 in each category – with just 18% calling themselves fiscal liberals.

Table 2. Survey of registered voters nationwide, Oct. 28-Nov. 1, 2011

	In general (Form A)	Social issues (Form B)	Fiscal issues (Form B)
Conservative	33%	36%	41%
Moderate	45%	29%	40%
Liberal	22%	34%	18%

Naturally, the electorates in the Republican presidential primaries were far more conservative just about across the board compared to registered voters nationally and in Massachusetts, as shown in tables 3 and 4.

Table 3. New Hampshire Republican presidential primary exit poll, Jan. 10, 2012

	In general (versions 1, 2)	Social issues (version 3)	Fiscal issues (version 3)
Conservative	53%	38%	65%
Moderate	35%	19%	17%
Liberal	12%	20%	8%

Table 4. Ohio Republican presidential primary exit poll, March 6, 2012

	In general (versions 1, 2)	Social issues (version 3)	Fiscal issues (version 3)
Conservative	66%	61%	76%
Moderate	26%	11%	10%
Liberal	8%	12%	8%

Next we will analyze patterns across all four surveys within each of the ideological categories. First, we find significantly more respondents called themselves liberal on social issues than did so “in general” in all four surveys, with the differences especially large among Massachusetts and national registered voters, as seen in Table 5. There also were significantly more social than fiscal liberals in all but the Ohio Republican exit poll. (As would be expected, relatively few Republican primary voters called themselves liberal on any of these measures, although one in five in New Hampshire did say they were liberal on social issues.)

Table 5. Self-described liberals

<u>LIBERAL</u>	<u>MA</u>	<u>US</u>	<u>NH-R</u>	<u>OH-R</u>
In general	27	22	12	8
Social issues	45	34	20	12
Fiscal issues	16	18	8	8
Social minus general	18*	12*	8*	4*
General minus fiscal	11*	4	4*	0
Social minus fiscal	29*	16*	12*	4

* $p < 0.05$

There were significantly more self-described moderates “in general” than on social issues across all four surveys, and more moderates on fiscal than social issues in the Massachusetts and national surveys of registered voters, as shown in Table 6. (And there were fewer moderates no matter what the ideological construct in the Republican primaries – again, not surprisingly, for as we shall see those electorates were overwhelmingly conservative in nearly all respects.)

Table 6. Self-described moderates

<u>MODERATE</u>	<u>MA</u>	<u>US</u>	<u>NH-R</u>	<u>OH-R</u>
In general	43	45	35	26
Social issues	28	29	19	11
Fiscal issues	43	40	17	10
General minus social	15*	16*	16*	15*
General minus fiscal	0	5	18*	16*
Fiscal minus social	15*	11*	-2	-1

* $p < 0.05$

Fiscal conservatives significantly outnumbered those who self-described as conservative “in general” in all four surveys, as seen in Table 7. Fiscal conservatives also were significantly more numerous than conservatives on social issues among Massachusetts registered voters and voters in the both Republican presidential primaries tested, although among registered voters nationwide the 5-point difference fell short of statistical significance. Only in the New Hampshire GOP primary were there significantly fewer conservatives on social issues than in general.

Table 7. Self-described conservatives

<u>CONSERVATIVE</u>	<u>MA</u>	<u>US</u>	<u>NH-R</u>	<u>OH-R</u>
In general	26	33	53	66
Social issues	22	36	38	61
Fiscal issues	37	41	65	76
General minus social	4	-3	15*	5
Fiscal minus general	11*	8*	12*	10*
Fiscal minus social	15*	5	27*	15*

* $p < 0.05$

For another perspective on this analysis, now we shall compare the distribution of results to the generic ideology question and the experimental treatments in the Massachusetts and national registered voter samples. We will omit the findings from the exit polls in this section because, as noted, those Republican primary electorates were largely conservative on nearly all measures,

We find that in both Massachusetts and nationally, pluralities of registered voters consider themselves moderate in general, as seen in Table 8. But in Massachusetts, well known as being among the more liberal states, about the same proportion of registered voters call themselves liberal as conservative; nationally, conservatives outpace liberals by 11 percentage points. Put another way, 33 percent of registered voters nationally consider themselves conservative in general, 7 points more than in Massachusetts.

Table 8. Self-described ideology “in general”

<u>In general</u>	<u>MA</u>	<u>US</u>
CONSERVATIVE	26	33
MODERATE	43	45
<u>LIBERAL</u>	<u>27</u>	<u>22</u>
Mod minus cons	17*	8*
Mod minus lib	16*	23*
Cons minus lib	-1	11*

* $p < 0.05$

But despite Massachusetts’ liberal reputation, its registered voters are no more likely than their counterparts nationwide to call themselves liberal on fiscal issues, as seen in Table 9. Among registered voters in Massachusetts and nationwide, liberals are far less numerous than moderates and conservatives on fiscal issues. In these experiments, with half-sample sizes of around 500 respondents or fewer, there were no statistically significant differences in the fiscal ideological distributions among registered voters nationally and in Massachusetts.

Table 9. Self-described ideology on “fiscal issues such as taxes and spending”

<u>Fiscal issues</u>	<u>MA</u>	<u>US</u>
CONSERVATIVE	37	41
MODERATE	43	40
<u>LIBERAL</u>	<u>16</u>	<u>18</u>
Cons minus lib	21*	23*
Mod minus cons	6	-1
Mod minus lib	27*	22*

* $p < 0.05$

It is on social issues where Massachusetts most earns its liberal reputation, as seen in Table 10; nearly half of registered voters there, 45%, call themselves liberal on social issues such as gay marriage and abortion, 11 points more than among registered voters nationwide. Social conservatives, conversely, are 13 points more numerous among registered voters nationwide than in Massachusetts, where only 22 percent call themselves conservative on social issues.

Table 10. Self-described ideology on “social issues such as gay marriage and abortion”

<u>Social issues</u>	<u>MA</u>	<u>US</u>
CONSERVATIVE	22	36
MODERATE	28	29
<u>LIBERAL</u>	<u>45</u>	<u>34</u>
Lib minus cons	23*	-2
Lib minus mod	-17*	5
Mod minus cons	6	-7*

* $p < 0.05$

Now we shall present graphical visualizations of some of the key findings in the foregoing analysis as well as additional data to illustrate how the experimental ideological constructs can enhance and provide nuance to our understanding of political ideology in modern American politics.

First, in Figures 1-3, we recap the distribution of responses to the generic ideology measure compared to the social and fiscal ideology constructs among Massachusetts registered voters:

Figure 1.

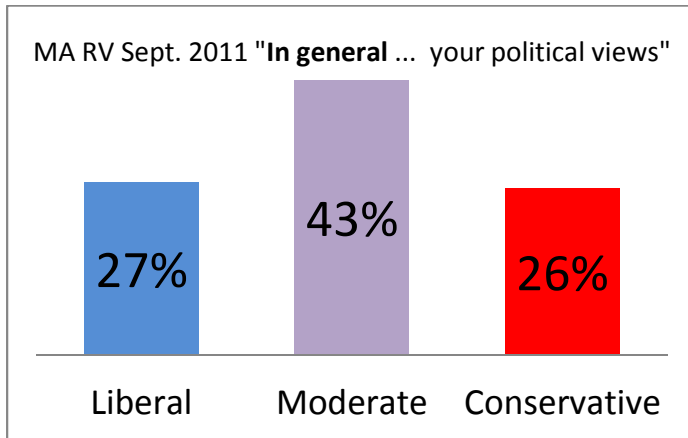


Figure 2.

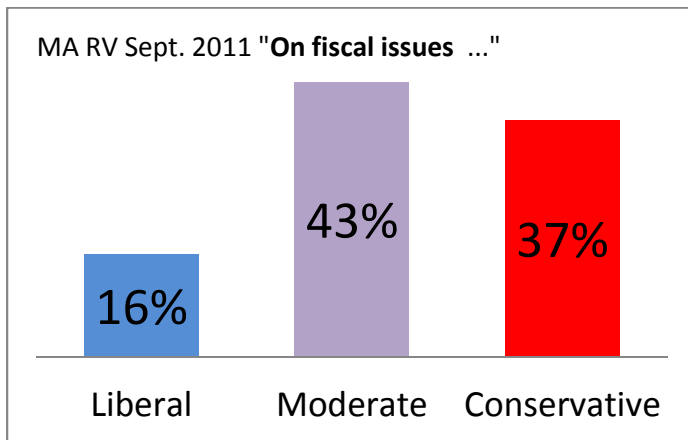


Figure 3.

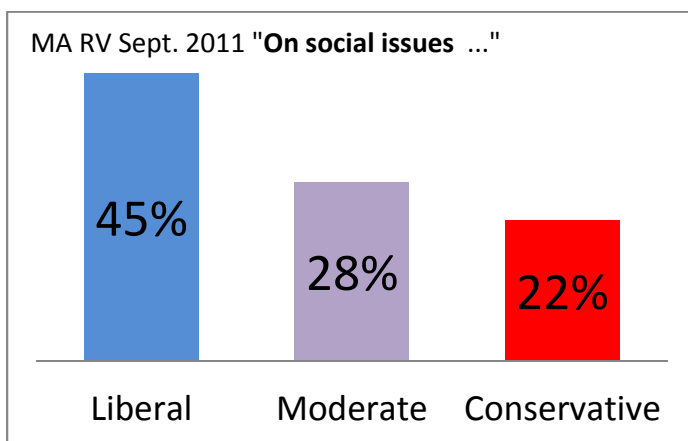


Figure 4 illustrates the proportions of Massachusetts registered voters who chose each of the ideological categories of at least one of the two experimental treatments, ideology framed by social or fiscal issues:

Figure 4.

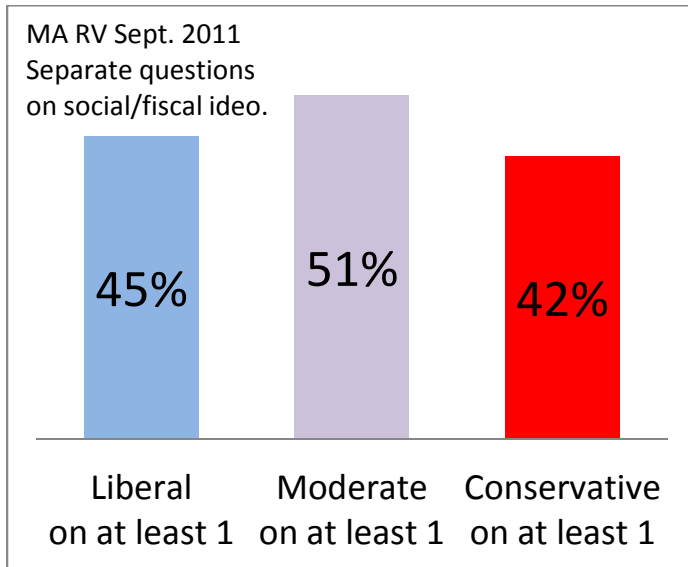
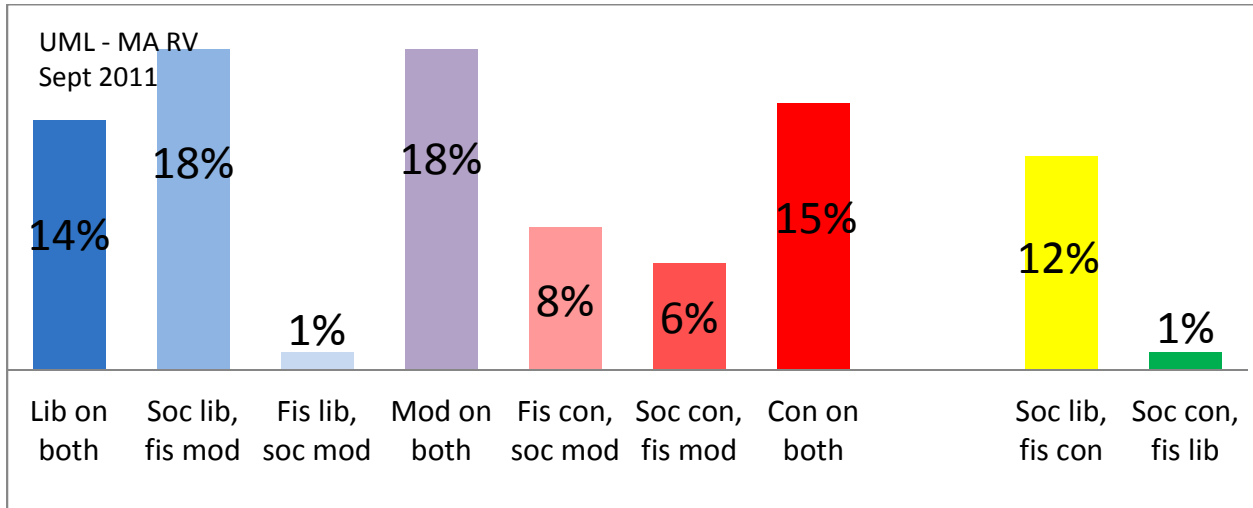


Figure 5 fully illustrates not just the full spectrum of Massachusetts registered voters' views on social and fiscal issues – from liberal on both to conservative on both. It also shows those who don't fit logically within that spectrum, who say they are liberal on one type of issue but conservative on the other – the most cross-pressured voters. We see that comparable numbers of respondents say they're liberal on both dimensions (14%) as conservative on both (15%), with 18% moderate on both. Meanwhile, 19% of Massachusetts are liberal on one dimension and moderate on the other, while 14% who are conservative on one dimension and moderate on the other. More clearly “cross-pressured” are the 12% of Massachusetts registered voters who call themselves liberal on social issues and conservative on fiscal issues, plus the 1% who are the reverse.

In all, we find that in our Massachusetts survey, 47% described themselves as liberal, moderate or conservative on both dimensions while 46% gave different answers to the two questions. (The remainder gave no opinion on one question, the other or both.) And respondents who called

themselves moderate on both dimensions – 18% – were substantially outnumbered by the total of 33% who self-identified as moderate on one dimension but not the other.

Figure 5.



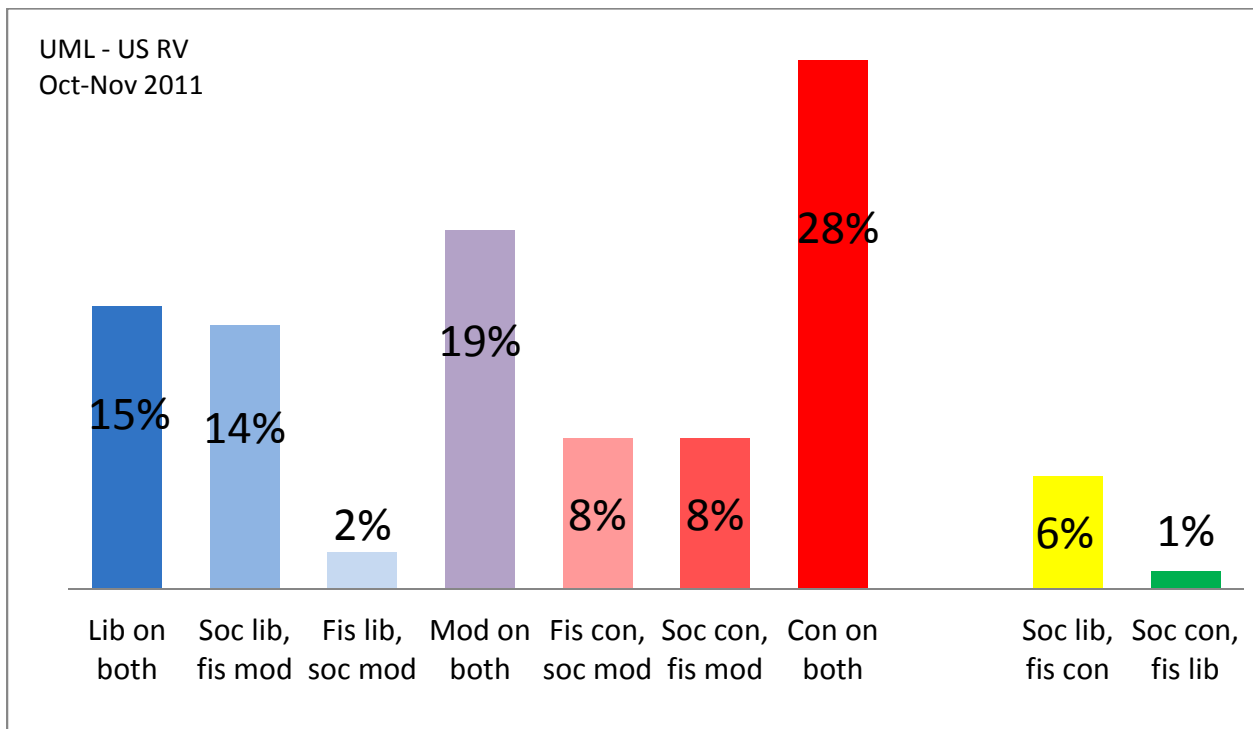
In Massachusetts, where Republicans are in a distinct minority while Democrats and Democratic-leaning independents predominate, Republicans sometimes win statewide office nonetheless – most recently Scott Brown in the special election for U.S. Senate in January 2010 after the death of longtime Democratic Sen. Edward M. Kennedy; and before that, a succession of Republican governors from 1991 to 2007, the most recent being Mitt Romney, who at this has clinched the 2012 Republican presidential nomination. Republicans began their gubernatorial winning streak in Massachusetts with the November 1990 election of William Weld, a contest that spawned the label “Weld Republicans” to describe voters who, like Weld, were strongly conservative on fiscal issues but moderate or even liberal on social issues.

Indeed the UMass Lowell survey of Massachusetts registered voters found solid evidence that “Weld Republicans” are alive and well in the state. Among leaned Republicans in the sample – those who described themselves as Republicans or independents who leaned toward the Republican Party – 33% called themselves conservative on fiscal issues but liberal (20%) or moderate (13%) on social issues. Fewer leaned Republicans, 26%, described themselves as conservative on both social and fiscal issues, and 13% said they were moderate on both.

Whereas Massachusetts registered voters were distributed fairly evenly along the multi-dimensional ideological spectrum (plus those who don't fit neatly within it), the UMass Lowell national survey found registered voters skewed more conservative – and slightly fewer of them were diametrically cross-pressured, as seen in Figure 6. Nationally the predominate group was the 28% of registered voters who described themselves as conservative both on social and fiscal issues, compared to just 15% who were liberal on both and 19% moderate on both. An identical 16% were liberal on one dimension and moderate on the other, or conservative on one dimension and moderate on the other. Additionally, 6% nationally were social liberals but fiscal conservatives, and 1% were the opposite.

In all, we find that in our national survey, 62% described themselves as liberal, moderate or conservative on both dimensions while 39% gave different answers to the two questions. (A trivial number of respondents skipped this question in the web survey.) As in our Massachusetts sample, respondents who were moderate on both social and fiscal dimensions – 19% - were substantially outnumbered by the 32% who called themselves moderate on one but not the other.

Figure 6.

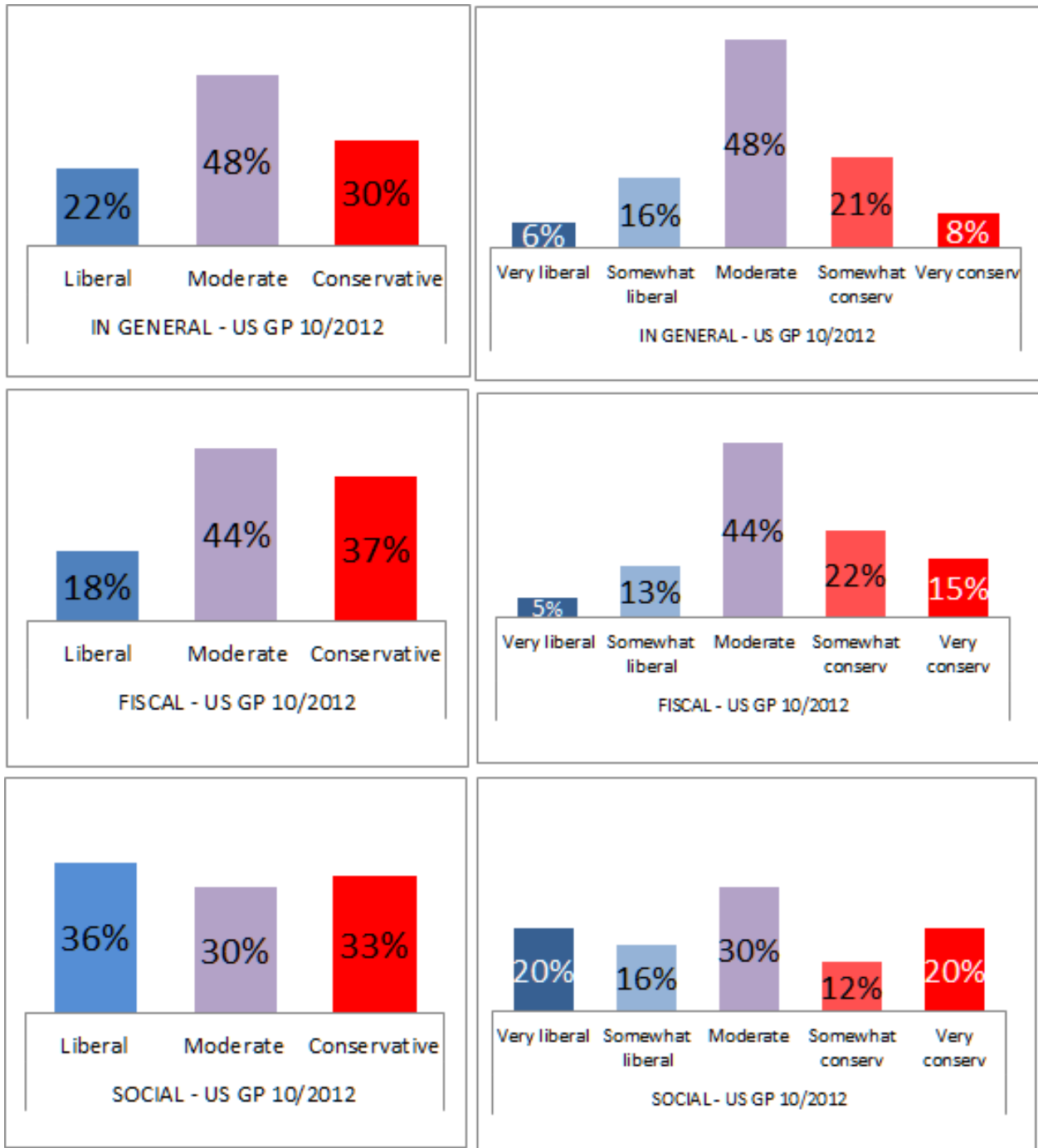


Ideological intensity

Unlike the Massachusetts RDD poll, the national probability-based online survey measured intensity of ideological views: “very” or “somewhat” conservative/liberal.⁹ (The Republican primary exit polls had the same five-part response pattern but we’ll focus here on the national data.) The charts in Figure 7 from the national poll show data for the general population, not just registered voters. We see a fairly normal distribution for the generic ideology questions, although conservatives slightly outnumber liberals; that pattern becomes more pronounced on the fiscal dimension. But on social ideology there’s an almost even three-way split, and in the intensity breakout, an identical 20% say they’re very liberal or very conservative.

⁹ It is possible that some respondents who would have described themselves as moderate on a dimension or generally if given only three choices (as in the Massachusetts telephone survey in this study) – liberal, moderate and conservative – instead checked “somewhat” liberal or conservative when presented with five options in the national survey. In fact, as shown in data below, 48% self-described as moderate in the five-point scale administered in the fall of 2011 compared with 38% in a seven-point ideology question answered by the same panel respondents earlier that year. When we initially designed the experiment for the Massachusetts survey using a three-point scale we did not know we subsequently would have opportunities to conduct the experiment using five- and seven-point scales.

Figure 7.



Respondent-level ideology comparisons

Because the sample is drawn from a panel of survey respondents, the Knowledge Networks (now GfK) dataset provides the possibility for an additional level of analysis: Comparing the 5-point generic, social and fiscal ideology variables from the Fall 2011 UMass Lowell survey with a different generic ideology measure, using a 7-point scale and measured in a Knowledge Networks profile survey earlier in the year (most of those interviews were in February 2011). This comparison finds a considerable degree of consistency in ideological self-identification, with some notable departures.

For sake of clarity and because of sample size constraints, this analysis collapses both the 5-point and 7-point measures into three categories each. Other caveats need to be noted. As discussed above, it is possible some seeming inconsistencies in ideological self-identification may be an artifact of the different number of response options. It also is possible – though impossible to know from the available data – that some respondents’ ideological views may have shifted at least slightly in the seven or eight months between the initial profile survey and the national poll in our study, in response to news and political events or for some other reasons, or that some views are weakly held and thus not reported with absolute consistency over time. Indeed, another Knowledge Networks study – the 10-wave Associated Press/Yahoo News 2008 National Election Panel Study – found that about half switched partisan identity (direction or intensity) at least once throughout the 10 waves, with 28% switching three or more times. This study also found that the stability (or lack thereof) of ideological self-identification was very close to that of party identification (Cobb and Nie, 2012).

First, Table 11 shows the response distribution for the 7-point Knowledge Networks scale among all adults who answered that question in the profile survey and who were selected for the UMass Lowell sample.

Table 11. Knowledge Networks profile data for UMass Lowell sample

Extremely liberal	5%
Liberal	12
Slightly liberal	10
Moderate, middle of the road	38
Slightly conservative	12
Conservative	17
Extremely conservative	4

Now we'll compare the UMass Lowell (5-point) and Knowledge Networks profile (7-point) generic variables. As shown in Table 12, 69% of respondents called themselves conservative on both and 76% moderate on both, but there was less consistency among liberals, 58% of whom identified as liberal on both surveys.

Table 12. Comparison of 5-point and 7-point variables on ideology "in general"

In general (collapsed from 5-point scale)	7 point ideology		
	Liberal (extremely liberal, liberal, slightly liberal)	Moderate, middle of the road	Conservative (extremely conservative, conservative, slightly conservative)
Liberal	58%	11%	1%
Moderate	32%	76%	30%
Conservative	10%	13%	69%
Total	100%	100%	100%

In Table 13 we compare the UMass Lowell social ideology construct with the 7-point generic measure from the Knowledge Networks profile survey. We find that generic liberals were highly likely to be socially liberal (77%), but generic conservatives were less likely to be socially conservative (60%). Of course this means that more than a fifth who said they were liberal in general described themselves as moderate or conservative on social issues, while four in 10 generic conservatives said they were moderate or liberal on social issues. And among those who

initially reported being moderate in general, a majority said that on social issues they were liberal (31%) or conservative (24%).

Table 13. Comparison of 5-point social ideology and 7-point general ideology variables

	7 point ideology		
Social issues (collapsed from 5-point scale)	Liberal (extremely liberal, liberal, slightly liberal)	Moderate, middle of the road	Conservative (extremely conservative, conservative, slightly conservative)
Liberal	77%	31%	16%
Moderate	17%	45%	24%
Conservative	5%	24%	60%
Total	100%	100%	100%

In Table 14 we compare the UMass Lowell fiscal ideology construct with the 7-point generic measure from the Knowledge Networks profile survey. Generic conservatives were highly likely (73%) to be fiscally conservative (though again, this means more than a quarter chose a moderate or liberal label on fiscal issues); generic liberals were far less likely to be fiscally liberal (44%, with about as many, 43%, saying they were fiscal moderates and 13% fiscal conservatives).

Table 14. Comparison of 5-point fiscal ideology and 7-point general ideology variables

	7 point ideology		
Fiscal issues (collapsed from 5-point scale)	Liberal (extremely liberal, liberal, slightly liberal)	Moderate, middle of the road	Conservative (extremely conservative, conservative, slightly conservative)
Liberal	44%	13%	6%
Moderate	43%	66%	21%
Conservative	13%	21%	73%
Total	100%	100%	100%

With two separate data points for the same respondents in the national survey, it also is possible to look at how cross-pressured respondents – those who describe themselves as liberal on one

ideological dimension (social or fiscal) and not liberal on the other, or conservative on one and not conservative on another – answered earlier in the year when presented with an uni-dimensional ideological self-assessment. However, in addition to the constraints noted above regarding possible threats to inference because of the passage of time and the varying number of response categories in the different measures, this part of the analysis also is constrained by very small sample sizes. With this caveat in mind, among those who are social conservatives but moderate or liberal on fiscal issues (n=42) it appears at least half self-identify generally as moderates, while among those who are fiscal conservatives but moderate or liberal on social issues (n=65), the modal response on the general ideological self-assessment is conservative.

We do have barely enough cases (N=105) to analyze how U.S. adults who call themselves moderate on both social and fiscal issues responded earlier in the year when asked to assess their ideology in general. In Table 15 we see that 30% of these supposedly “consistent” (social + fiscal) moderates picked something other than “moderate” on a 7-point generic scale, including 16% who picked categories more than one scale point away from the moderate midpoint.

Table 15. Knowledge Networks profile data distribution for UMass Lowell respondents who self-identified as moderate both on social and fiscal issues

Extremely liberal	3%
Liberal	6
Slightly liberal	4
Moderate, middle of the road	70
Slightly conservative	11
Conservative	6
Extremely conservative	1

Voting Behavior

What are the implications of these patterns for how respondents vote? The September 2011 survey of Massachusetts registered voters asked respondents for whom they likely would vote for U.S. Senate in November 2012, and the exit polls in the New Hampshire and Ohio Republican primaries asked voters for whom they had just cast their ballot. The next part of our

analysis will review intended and actual vote by single- and multi-dimensional ideological measures in these three surveys. The national survey in the fall of 2011 focused on the Occupy Wall Street and Tea Party movements and did not include any vote intention questions; thus it is excluded from this part of our analysis.

The Massachusetts survey was the first in which we conducted our experiment. In analyzing those results by vote intention, it should be noted that this poll was conducted more than a year before the state would hold its U.S. Senate general election, and Elizabeth Warren, who at this writing is the Democratic nominee for the seat against Republican incumbent Scott Brown, had announced her candidacy only the week before the survey went into the field. Another question in the survey found 37% of respondents had not yet heard of Warren; that and the form of the trial heat question likely account for the fairly sizeable proportion – nearly one in five respondents – who expressed no opinion on Senate vote preference.¹⁰

To put these results in context, among all Massachusetts registered voters, 41% said in this poll they were likely to vote for Brown and 38% for Warren. While subgroup sizes were fairly small, Table 16 shows Brown had an edge over Warren among social moderates but Warren had the advantage among fiscal moderates and is at least even with Brown among those who say they are moderate in general. Meanwhile, self-described conservatives on all three measures favored Brown over Warren by nearly identical margins, of 43 to 46 points.

Also, Brown was winning over a relatively sizeable number, 28%, of social liberals, who made up 45% of the sample. This is an important detail in Massachusetts, where a Republican must gain substantial support outside his or her natural base to have a chance of winning in the heavily

¹⁰ Overall, 14% volunteered a “don’t know” answer to the trial heat question and 3% volunteered that they had not heard of Elizabeth Warren. The question wording – chosen because we were conducting hypothetical trial heats on numerous other Democrats who at the time either were seeking the party’s Senate nomination or were well-known but had decided not to run – was: “Thinking now about the U.S. Senate general election in November 2012 ... please tell me for whom you likely would vote if it came down to a choice between Scott Brown, the Republican, and each of the following Democrats. First, what if you had to choose between Scott Brown and **[FIRST NAME]**? Next, what if you had to choose between Scott Brown and **[NEXT NAME]**?”

Democratic state. But this crossover was muted in the general ideology question, where a smaller share of voters, 27%, self-described as liberal and Brown was favored by 20% of them.

Finally, we can conclude that in the Massachusetts survey, self-described fiscal ideology better predicted the general ideological measure than did the social ideology construct, at least in the liberal and moderate categories. We would not see this pattern repeated later in the Ohio Republican presidential primary exit poll.

Table 16. Vote preference for U.S. Senate in Massachusetts by single- and multi-dimensional ideology

		Likely to vote in November 2012 for:			
ALL	In general, would you describe your political views as:	Scott Brown, the Republican	Elizabeth Warren, the Democrat	Other / no opinion	N =
27%	Liberal	20%	59%	21%	136
43%	Moderate	38%	44%	18%	229
26%	Conservative	65%	19%	17%	126

		Likely to vote in November 2012 for:			
ALL	On social issues such as gay marriage and abortion, in general would you describe your views as:	Scott Brown, the Republican	Elizabeth Warren, the Democrat	Other / no opinion	N =
45%	Liberal	28%	49%	23%	227
28%	Moderate	48%	33%	19%	132
22%	Conservative	62%	19%	19%	114

		Likely to vote in November 2012 for:			
ALL	On fiscal issues such as taxes and spending, in general would you describe your views as:	Scott Brown, the Republican	Elizabeth Warren, the Democrat	Other / no opinion	N =
16%	Liberal	19%	62%	18%	88
43%	Moderate	34%	43%	23%	205
37%	Conservative	65%	19%	17%	189

The exit poll in the New Hampshire Republican presidential primary in January 2012 offers limited analytical value of the ideology measures in terms of vote preference, because Mitt

Romney – at this writing the presumptive GOP nominee – easily won what was seen as one of his “home” states; the field of candidates at that point was still large and thus the non-Romney vote was diffused; and the contest came before Newt Gingrich and Rick Santorum had their respective surges against Romney in later primaries, so they got too few votes in New Hampshire for meaningful analysis.

That said, broad findings from New Hampshire include that Romney ran strongest among generic “somewhat conservative” voters and social moderates, and weakest among those who considered themselves very conservative on social issues. (The exit polls used five-point scales for the ideology questions.) Among other findings of note from the New Hampshire GOP primary electorate: 89% of social conservatives also considered themselves conservative on fiscal issues, while 52% of fiscal conservatives also called themselves conservative on social issues. Also, 66% of strong supporters of the Tea Party movement called themselves strong fiscal conservatives, compared to just 39% who said they were strong social conservatives; in fact 42% of strong supporters of the Tea Party self-described as social moderates or liberals.

By the time of the Ohio Republican presidential primary, on “Super Tuesday” on March 6, 2012, Rick Santorum had emerged as the last strong challenger to Romney in the primaries. Romney wound up beating Santorum in the Ohio vote by about 1 percentage point.

In the results shown in Table 17 there were no statistically significant differences in the Romney-Santorum vote preference margins in the general ideological measure and the fiscal construct. It is possible some differences would have been significant with larger sample sizes, however; Santorum beat Romney by a significant 18 points among voters who called themselves very conservative in general, but Santorum’s margin among those who called themselves very conservative on fiscal issues was 9 points, which in this sampling was not significant.

As in the Massachusetts survey of all registered voters in the state, the Ohio Republican primary exit poll yielded the biggest differences in vote preference on the social ideological dimension – including a 28-point advantage for Santorum among those who identify as very conservative on social issues. These results may well reflect perceptions that Santorum was much more conservative than Romney on social issues, while there was not as much difference between

them on economic matters. This dynamic also may explain why, unlike in Massachusetts, the vote pattern within the fiscal ideology construct did not track the general ideological measure more closely than did the social ideology question. (Romney eked out victory in Ohio by holding his own or beating Santorum among voters who called themselves somewhat conservative, moderate or liberal in general or on social issues, as those voters were at least two-thirds of the electorate.)

Table 17. Presidential preference in 2012 Ohio Republican primary exit poll by single- and multi-dimensional ideology

ALL	Political views “in general”	Voted for:		Diff (Romney – Santorum)	N =
		Mitt Romney	Rick Santorum		
32%	Very conservative	30%	48%	-18*	537
34%	Somewhat conservative	40%	34%	6	594
34%	Moderate or liberal	43%	29%	14*	607

ALL	Views on social issues such as gay marriage and abortion	Voted for:		Diff (Romney – Santorum)	N =
		Mitt Romney	Rick Santorum		
42%	Very conservative	25%	53%	-28*	382
18%	Somewhat conservative	43%	33%	10	169
39%	Moderate or liberal	45%	26%	19*	352

ALL	Views on fiscal issues such as taxes and spending	Voted for:		Diff (Romney – Santorum)	N =
		Mitt Romney	Rick Santorum		
47%	Very conservative	33%	42%	-9	420
28%	Somewhat conservative	41%	37%	4	259
24%	Moderate or liberal	37%	35%	2	222

* $p < 0.05$

CONCLUSIONS

The traditional single-dimensional measure of self-assessed ideology may adequately capture the broadest contours of a public's political philosophy – for example, to discern that Massachusetts generally is more liberal and Republican presidential primary electorates are more conservative than the nation as a whole. But the generic labels “liberal,” “moderate” and “conservative” mask what for many Americans actually are mixed views – sometimes dramatically so – on different kinds of important, often difficult, issues.

In the national survey in this experiment, using a five-point response scale, 39% of registered voters labeled themselves one way when asked to describe their views on social issues and another way on fiscal issues, including 7% who were most clearly cross-pressured, saying they were liberal on one dimension and conservative on another. Also, those who called themselves moderate on both dimensions, 18%, were outnumbered by the 32% who said they were moderate on one but liberal or conservative on the other. In the Massachusetts survey, which used a three-point scale, 46% of registered voters labeled themselves differently on fiscal and social dimensions, including 12 percent who said they were both liberal on social issues and conservative on fiscal issues; respondents who called themselves moderate on both dimensions – 18% – were substantially outnumbered by the total of 33% who self-identified as moderate on one dimension but not the other.

In comparing our multi-dimensional ideological measure from the fall 2011 national survey data with a generic ideology question asked of the same respondents earlier in the year, at least half of generic moderates later called themselves conservative or liberal on social or fiscal issues. Four in 10 of those who said they were conservative overall later labeled themselves as moderate or even liberal on social issues. And more than a fifth of those who considered themselves liberal overall later identified as moderate or even conservative on social issues. Meanwhile, generic liberals were even more likely to call themselves fiscal moderates or conservatives, while more than a quarter of generic conservatives would not describe themselves as fiscal conservatives, and a third of generic moderates were either liberal or conservative on fiscal issues. As discussed above, the structure and timing of these questions may constrain the reliability of these

inferences to some extent, but these numbers are so large that it seems clear the generic ideological measure misses important detail and nuance.

This matters in analyzing voting preferences and behavior. This paper presented numerous examples of divergence in prospective or retrospective vote depending on the voter's views of social versus fiscal issues and compared to a general ideology variable. In heavily Democratic Massachusetts, for example, Republican Sen. Scott Brown must do well among moderates and win over a decent share of liberals to win re-election against Democratic challenger Elizabeth Warren; analysts who would rely only on the generic ideological construct would miss such important factors as Brown leading among social moderates and even getting 28% of social liberals, but trailing among fiscal moderates.

In analyzing polarization in modern American politics it also is critical to have a detailed and accurate understanding of Americans' ideological beliefs across multiple dimensions, not just in general. As Treier and Hillygus note, "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."

There are numerous avenues for future research on self-described ideology; some of our findings may depend on the specific approaches we took in designing our experiment. Numerous question wording experiments are possible. As noted, since 2001 the Gallup Organization has on an annual basis asked respondents to describe their views on "economic issues" and "social issues" – without including examples, as we did – and a number of Gallup's findings differ substantially from ours (Jones 2012). It would be useful to try to determine whether the presence or absence of example issues as cues affects the results and if so, how so. Alternatively, different examples that what we used may be employed to cue the respondent to what is meant by "social" and "fiscal" (or "economic") issues. Future experiments also might strive for greater consistency in the number of scale points in the response set. Also worth testing would be ways to try to ask a generic ideology question on the same instrument and of the same respondents as the multidimensional approach, while controlling for or at least mitigating order effects, to allow

cross-tabulation of those variables from one data collection period rather than months apart, as was the case in the national survey in our study.

References

Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes. 1960. *The American Voter*. New York: John Wiley and Sons.

Cobb, Curtiss L. III and Norman H. Nie. 2012. "The Dynamics of Partisanship Within Election Cycles." Paper presented at the 67th annual conference of the American Association for Public Opinion Research, Orlando, Fla., May 19, 2012.

Conover, Pamela Johnston and Stanley Feldman. 1981. "The Origins and Meaning of Liberal/Conservative Self-Identifications." *American Journal of Political Science* 25(4).

Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In David Apter, pd., *Ideology and Discontent*. New York: Free Press

Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper Collins

Duverger, Maurice. 1951. *Political parties: Their organization and activity in the modern state*. London: Methuen.

Gallup Poll (AIPO), Apr, 1937. Retrieved May 16, 2012, from the iPOLL Databank, The Roper Center for Public Opinion Research, University of Connecticut.

http://www.ropercenter.uconn.edu/data_access/ipoll/ipoll.html

Hinich, Melvin and Michael Munger. 1994. *Ideology and the Theory of Political Choice*. Ann Arbor, Mich.: University of Michigan Press.

Jones, Jeffrey M. 2012. "In U.S., Nearly Half Identify as Economic Conservative." Report released May 25, 2012. <http://www.gallup.com/poll/154889/Nearly-Half-Identify-Economically-Conservative.aspx> . Retrieved July 12, 2012.

Kritzer, Herbert M. 1978. "Ideology and American Political Elites." *Public Opinion Quarterly* 42 (4): 484-502.

Levitin, Teresa E. and Warren E. Miller, 1979. "Ideological, Interpretations of Presidential Elections." *American Political Science Review* 73(3): 751-71.

Luttbeg, Norman R., and Michael M. Gant. 1985. "The Failure of Liberal/Conservative Ideology as a Cognitive Structure." *Public Opinion Quarterly* 49 (1): 80-93.

Los Angeles Times Poll, December 1978. Retrieved May 16, 2012, from the iPOLL Databank, The Roper Center for Public Opinion Research, University of Connecticut.

McClosky, Herbert. 1958. "Conservatism and Personality." *American Political Science Review* 52:27-45.

Nie, Norman H., and Kristi Anderson. 1974. "Mass belief systems revisited: political change and attitude structure." *Journal of Politics* 36:540-91.

Pew Research Center. 2012. "Trends in American Values: 1987-2012; Partisan Polarization Surges in Bush, Obama Years." Report released June 4, 2012. <http://www.people-press.org/files/legacy-pdf/06-04-12%20Values%20Release.pdf>, retrieved June 4, 2012.

Smith, Tom W. 1990. "Liberal and Conservative Trends in the United States Since World War II." *Public Opinion Quarterly* 54 (4):479-507.

Robinson, John P. and John A. Fleishman. 1988. "Ideological Identification: Trends and Interpretations of the Liberal-Conservative Balance." *Public Opinion Quarterly* 52 (1): 134-145.

Poole, Keith, and Howard Rosenthal. 2012. Research presented and archived at their website http://voteview.com/political_polarization.asp. Updated May 10, 2012; retrieved July 14, 2012.

Treier, Shawn and D. Sunshine Hillygus. 2009 “The Nature of Political Ideology in the Contemporary Electorate”, *Public Opinion Quarterly* 73(4): 679-703.