Measuring Democratic Responsiveness

Jason Barabas
Assistant Professor
Florida State University
Department of Political Science
Tallahassee, FL 32306-2230
850-644-4097
jason.barabas@fsu.edu

May 25, 2007

Abstract

Democratic responsiveness measures the degree to which governmental policies match public preferences. To discern the public’s policy preferences, scholars usually rely on opinion surveys. Despite huge increases in the number of poll questions since the 1930s, few concern policy preferences and even fewer correspond to the national issue agenda. I argue that changes in polling behavior over time and in the policy content of the questions could affect perceptions of democratic responsiveness. Probit analyses show that public opinion often predicts democratic responsiveness and policy output in the United States, especially on salient issues, but that relationship appears to be weaker in the late-1990s and early-2000s than it was in previous decades. The decline in policy questions from the legislative agenda means that future changes in democratic responsiveness, for the better or the worse, might go undetected.

* An earlier version of this paper was presented at the Annual Meeting of the Midwest Political Science Association conference. I appreciate the helpful comments and assistance I received from Jorge Abram Abugaber, John Benson, Bill Berry, Sarah Binder, Patrick Brandt, Jared Clapper, Mark DeVries, Andrew Felto, Chris Gunn, Danny Hill, Jennifer Jerit, Betsi McGraw, James Robinson, Andrea Villate, and from the staff members of the Roper Center for Public Opinion Research as well as the participants in research workshops at the University of Connecticut and Florida State University. The Robert Wood Johnson Foundation provided generous research assistance through its Scholars in Health Policy Research Program.
Some of the most startling findings in political science recently have come from studies showing that average Americans are less likely to get what they want from government today than they were years ago. Studies like these serve as a litmus test for the health of a democracy. They build upon and go beyond earlier work showing that representation varies across issues (Miller and Stokes 1963; Monroe 1998; Wlezien 1996; 2004) and salient topics (Page and Shapiro 1983). They also go beyond reports that opinion-policy responsiveness varies across the American states (Erikson, McIver, and Wright 1993) and institutions (Erikson, McKuen, and Stimson 2002; Kuklinski 1978). They are important because as some theorists note (e.g., Dahl 1956; Pitkin 1967), there are deep normative concerns at stake when responsiveness declines over time (Jacobs and Shapiro 2000; Monroe 1998) or when policy tends to favor business leaders (Jacobs and Page 2005) or affluent individuals (Gilens 2005) over the mass public.

Do citizens get what they want from government? A more basic question is how can we tell? In response to questions like these, scholars chart variations in “democratic responsiveness,” which, loosely, is the correspondence between public opinion and public policy. Later I elaborate on this definition and analytical challenges like establishing causality (e.g., Page 1994), but the main point of this paper is that traditional measures of democratic responsiveness obscure the degree to which poll questions match the national legislative agenda. Stated another way, modern survey research is the primary tool used to measure public opinion (Asher 2004; Herbst 1993). If we care about the relationship between opinion and policy, then it is important to recognize how variations in polling behavior affect perceptions of democratic responsiveness.

Despite allegations that politicians pander to the public (Simon 2006; cf. Jacobs and Shapiro 2000) or theories of leadership in the polling era (Canes-Wrone 2006; Geer 1996), we know little about the prevalence of poll questions at any point in time (cf. Druckman and Jacobs
In other words, scholars have successfully scoured the archives for poll trends on issues like Social Security and Medicare (e.g., Shaw and Mysiewicz 2004). They have been less systematic, however, when it comes to studying how changes in the availability of polling data alter our impressions of democratic responsiveness, particularly the degree to which policy matches polling data as well as questions that were never asked but could have been.

This study employs a vast collection of public opinion data to assess how developments in survey research affect perceptions of democratic responsiveness. Preliminary findings from the analyses thus far suggest that changes in the frequency of polling and in the policy content of the questions asked relative to the topics on the national agenda can affect conclusions about democratic responsiveness. On issues where polling data covers the national legislative agenda well, democratic responsiveness appears to have declined since the late-1970s. Perhaps even more worrisome, though, the ability to detect changes in responsiveness seems to be eroding at an even faster pace due to the growing scarcity of policy-specific poll questions.

Measuring Opinion-Policy Responsiveness

Scholars typically measure opinion-policy responsiveness in one of three ways. One approach is dyadic, where the behavior of elected representatives varies with public opinion (e.g., Achen 1978; Bartels 1991; Hill and Hurley 1999; Miller and Stokes 1963). A second tactic assesses the degree to which changes in the public’s policy preferences are associated with changes in public policy (Page and Shapiro 1983) or the degree to which changes in global measures of public mood play out across various governmental institutions (Erikson, MacKuen, and Stimson 2002). A third and related variant considers the relationship between majority opinion and policy at any given point in time (e.g., Monroe 1979; 1998). Viewed statically (i.e.,
not over time), policy tends to correspond with majority opinion most of the time, especially on salient issues (see Manza and Cook 2002a; 2002b; Burstein 2003; or Kuklinski and Segura 1995 for reviews).\(^1\) All three approaches have virtues, but only the last two address “…the responsiveness of the political system as a whole” (Page and Shapiro 1983, 176).

An unsettling finding is that responsiveness declined during the last few decades. For example, two studies by Monroe (1979, 1998) reveal that government policies in the 1980 to 1991 period were less consistent with the preferences of a majority of the American public than during the 1960-1979 period; consistency declined from 63 percent in the first period to 55 percent in the second. Similarly, Jacobs and Shapiro (1997) found that congruency of opinion and policy change on welfare, crime, Social Security, and health fell from 67 percent during the Reagan Administration (1984-1987) to 40 percent during the Bush administration (1988-1991) before bottoming at 37 percent during the early years of the Clinton administration (1992-1994). Most recently, Gilens (2005, 784) found low levels of responsiveness in the 1981 to 2002 period; in a sample of more than 1,700 policy questions, only 35% of the policy changes in his study took place despite majority support for change in roughly 59% of the survey questions.\(^2\)

These trends are ominous. Citizens appear to be getting less from their elected representatives today than they were a few decades ago. The implication is that democracy in America does not work as well as it once did, especially not for the poor (Gilens 2005). Among the causes that Jacobs and Shapiro (2000) cite is the rise of “crafted talk” where politicians package their proposals to resonate with members of the public so that they appear responsive

---

\(^1\) Most of what follows concerns operationalizations of responsiveness. According to Jacobs and Shapiro (2000), responsiveness occurs when, “…the public’s substantive preferences point government officials in specific policy directions…” (p. 302; also see Page and Shapiro 1983). It is similar to representation, which according to Pitkin (1967) is, “…acting…in a manner responsive [to the represented]…” (P. 209-10). Representation and responsiveness occur when government actions reflect what most citizens want (i.e., what majorities want).

\(^2\) See Gilens (2005) for the limitations of consistency scores, especially Appendix A on status quo bias. Page and Shapiro (1983) also report declining responsiveness over time, from 67% congruence during 1935-45 to 54% during the 1960s before rebounding somewhat in the 1970s.
without actually being so. Feeding these developments are party polarization, individualization in Congress, incumbency, interest groups, and divisive interbranch relations. As Jacobs and Shapiro (2000) conclude in their book, *Politicians Don’t Pander*, “Our main point is that the influence of public opinion on government policy is less than it has been in the past…” (p. xvi) and they point to “The general decline in responsiveness since the 1970s…” (p. 5). Others share their perception that responsiveness has declined or stagnated since the 1970s (Mooney and Lee 2000; also see Burstein 2003, 35).

However, alternative methods lead to different conclusions. In his review of the literature, Burstein (2003) reports that analysts using explicit overtime comparisons within the same study “find more evidence of increase than decline…” (p. 36). In particular, studies using aggregate-level time-series approaches tend to paint a more optimistic picture (Stimson, MacKuen, and Erikson 1995; Erikson, MacKuen, and Stimson 2002; Wlezien 1995; 2004). There is some question, then, as to whether democracy is really declining in the U.S., and part of the uncertainty stems from the different techniques scholars use to define and study responsiveness.

**The Denominator of Democratic Responsiveness**

Democratic responsiveness (DR) is often operationalized as the number of times public policy is (or moves in a manner) consistent with public opinion majorities. In other words, DR is the number of policies consistent with public preferences (PC) over the number of issues on which there is public opinion data on policy preferences (PO) so that,

\[
\text{Democratic Responsiveness (DR)} = \frac{\text{Policy Consistency (PC)}}{\text{Policy Opinions (PO)}}
\] (1)
Monroe (1998) adopts this basic DR formulation. He looks for majority sentiment and asks, is policy consistent with majority sentiment? If it is, then that opinion-policy pair is added to the numerator. All available instances of policy preferences measured by polls appear in the denominator. A variant of this basic calculation appears in Page and Shapiro’s (1983) classic study. They look for sizable, 6 percentage point, changes in public opinion. The number of times policy shifted in a congruent manner goes in the numerator while the total number of available instances appears in the denominator (for other covariation approaches, see Weissberg 1978).³

What this means is that studies of democratic responsiveness are heavily dependent upon polling data. In other words, one downside of the reliance on public opinion surveys is that we can only perform this calculation in areas where data exist. Page (2002, 332) acknowledges as much when he states, “…one fundamental type of sampling bias subtly, and almost inescapably, affects nearly all studies of opinion-policy links. We can study the impact of public opinion only to the extent that public opinion is measured.” Similarly, in a review of the opinion-policy responsiveness literature, Burstein (2003, 38) writes, “Studies of the impact of policy on opinion always begin with public opinion—that is, with issues for which public opinion data are available. But such data are available for only a small fraction of all issues, those controversial enough to warrant attention from survey organization.”⁴

Perceptions of a decline in democratic responsiveness might be illusory. There have been dramatic changes in polling, particularly in the 1970s as pollsters started to use telephone survey methods and computers to make polling more cost effective (Rossi, Wright, and Anderson 1983;

---

³ Gilens (2005) adopts a variant by modeling how the intensity of public preferences for policy change (i.e., 55% versus 90%) are associated with actual policy change.
⁴ Polls are important for Jacobs and Shapiro (2000) because “Public opinion research is used by politicians to manipulate public opinion…to simulate responsiveness. Their words and presentations are crafted to change public opinion and create the appearance of responsiveness as they pursue their desired policy goals” (p. xv; emphasis original; also see Geer 1996). Their book employs in-depth case studies so it does not make explicit DR calculations over time. Yet, they cite DR research that does and perform DR-calculations elsewhere (Jacobs and Shapiro 1997).
As Jacobs and Shapiro (2005, 637) note, “Today, polls and pollsters have proliferated….” Few doubt that assertion (see, for example, Asher 2001, 3), but the timing of the proliferation is important. A year-by-year count of all poll questions (n=477,170) from 1936 to 2006 in the iPoll database from the Roper Center for Public Opinion Research reveals a significant increase in the number of questions at approximately the same time as the decline in democratic responsiveness. The substantial increase in the number of poll questions could make it seem like democratic responsiveness is falling because there are simply more opportunities for opinion and policy to diverge. Thus, a technology often thought to enhance democracy—polling—might be indirectly contributing to the impression that it is in decline. As I argue next, however, it depends on whether pollsters ask about public policy.

### Polling on Policies

In calculating DR scores, scholars are limited to available poll data. However, lawmakers might act on legislative agenda items not covered by poll questions. This problem plagued studies of legislative gridlock; accurately characterizing the amount of legislation that fails to pass as a result of factors like divided government (the numerator) is heavily dependent on how one specifies the national policy agenda (the denominator). In a landmark study, David Mayhew (1991) suggested that divided government did not affect legislative output. More recently,

---

5 According to government data cited in Tuchfarber and Klecka (1976, 14), more than 90 of U.S. households had telephone service by 1976. The authors also reported that, “The total cost of the 1,000-household RDD survey is therefore only 29 percent of that of the comparable personal survey. Cost savings accrue through the use of RDD because of savings in the sampling and data collection phase (sampling, interviewing, coding, and keypunching) on the survey project” and “…RDD will provide even larger cost savings if sample sizes are increased beyond the 1,000 households…” (p. 14). Polling changed in the late-1970s. It became cheaper, easier, and more prevalent.

6 A poisson exponentially weighted moving average (PEWMA) model for dynamic event counts such as the poll question series produces large and significant coefficients on the “intervention” representing the introduction of telephone polling in the mid-1970s. The break in the series appears to have occurred around 1978, which has a large intervention term of 2.14 (se=.06, z=3.38) with a significant omega time series parameter (coeff.= .002; se=.000; z=33.1). See Brandt et al. (2000) for technical details on the model. Elsewhere I attempt to explain this variation.
however, Sarah Binder (1999; 2003) argues that gridlock seems to reduce legislative output if the size of the policy agenda is taken into consideration.7

A similar problem of identifying the denominator looms in the background of democratic responsiveness calculations. If the same logic is applied to the literature on democratic responsiveness, a revised (or weighted) DR formula might look something like the following:

\[
\text{Democratic Responsiveness (PAWDR)} = \frac{\text{Policy Consistency (PC)}}{\text{Policy Opinions (PO)}} \times \frac{\text{Policy Opinions (PO)}}{\text{National Policy Agenda (NPA)}}
\]

which after canceling terms reduces to the number of policies consistent with public preferences (PC) over the policies being considered from the national policy agenda (NPA). A bit later I will refine this further into instances when the public either wanted policy change and it changed or when people preferred the status quo and policy did not change, but the basic intuition is that responsiveness is a function of elite behavior (i.e., policy), polling, and the legislative agenda.

Weighting in this manner has the potential to influence judgments of democratic responsiveness.8 As Brehm (1993) writes, “There is hardly an aspect of American political life untouched by polling and survey research” (p.3). So it would seem, yet the polling agenda probably does not match the national policy agenda perfectly. If politicians spend at least some of their time acting on issues that are ignored by pollsters, it might seem like responsiveness is declining; in other words, the public might not get what they want on topics that pollsters ask

---

7 Binder (2003) uses New York Times editorials to determine the policy agenda and then uses this in the denominator of a gridlock calculation with the number of policies that failed to pass in the numerator. Interestingly, a lagged public mood variable does not affect gridlock (Ch. 4 and App. C), which suggests that public preferences do not influence public policy output once other factors are considered. Later, I re-evaluate this claim. For a review of other divided government works, see Binder (2003, especially footnotes 5 and 6 on pages 161-2). Scholarship on voter turnout is also heavily dependent upon how one specifies the denominator (e.g., McDonald and Popkin 2001).

8 In Monroe (1979) and Page and Shapiro (1983), instances of nonresponsiveness include no movement in policy or movement away from majority preferences.
about, but those topics might not reflect the legislative agenda.\footnote{Charting the numerator is hard too, especially when pollsters ask about a policy area in general without specifying a particular piece of legislation (e.g., questions about welfare spending might pertain to food stamps or Temporary Assistance for Needy Families [TANF], but what about the earned income tax credit?). As Page and Shapiro (1983, 176) note, “…some opinion items are so ambiguous that they are not easily matched with specific policies.”} Thus, PAWDR scores might be lower than traditional DR scores to the extent that polls fail to cover the entire policy agenda, yet it is important to evaluate politicians’ sensitivity to public opinion on the whole set of issues they are considering. Simulations presented in the next subsection illustrate these points concerning the prevalence of polling data as well as the importance of accounting for the size of the agenda.

**Simulating Democratic Responsiveness**

Hypothetical changes in the rate of poll question proliferation are shown in the two panels of Figure 2. The solid lines in Panel A show constant (5%) changes in the number of public opinion polls. Starting from the midpoint on the responsiveness scale (i.e., responsiveness = .50 based upon 25 instances where the public gets what it wants out of 50 possible poll questions pertaining to policy preferences), the solid lines of the graph show that responsiveness appears to increase as the number of polls drops (line with circle) and decrease as the number of polls rises at a constant rate in each time period (line with triangle). The line in the middle (squares) depicts constant democratic responsiveness (25 instances of responsiveness out of 50 issues at every time point).

The dotted lines of Panel A show the same representation scores on an agenda weighted scale, where the size of the agenda is arbitrarily set to 117, a fairly typical number according to Binder’s (1999, 524) data. Again, taking the size of the agenda into account influences judgments of representation, downward in this example, as do the changes in the number of opinion questions at any given point in time. It is important to note that in all of the simulations in Panel A, elite behavior (e.g., the rate of policy output) is held constant at each period yet
democratic responsiveness changes; it rises as the number of poll questions decreases, and it drops as the number of poll questions increases. Moreover DR scores are generally lower if, as is probably the case, the polling agenda does not completely overlap the legislative agenda.

Figure 2 here

The moving parts of the simulations in Panel A are the numbers of poll questions at any given point in time which increase or decrease at (what might be unrealistic) constant rates. Panel B shows simulations that use variable rates of change and which relax two other assumptions concerning elite behavior: the size of the agenda and how many times elites pass legislation consistent with majority opinion. In Panel B of Figure 2, I randomly shock all three series—the number of poll questions, the size of the agenda, and elite behavior—with five or ten percentage point increases or decreases in each time period. Given a sufficient decrease in polls (the solid black circles), responsiveness rises to .88 (or almost 9 out of ten times policy mirrors majority opinion), even if one takes the policy agenda into consideration. It can also fall precipitously, as it does with the black triangles, to the point where it ends up at the same .26 value as does the line for the agenda weighted series with no changes in the number of polls (the dotted line with open squares).

Empirical Expectations

These hypothetical simulations underscore the point that perceptions of democratic responsiveness are related to what policies are enacted and the size of the agenda as well as what citizens want and how well we know what they want. In modern societies, polling serves as the

---

10 Specifically, the rate of change in the number of poll questions varies randomly with five or ten percentage point increases/decreases in the number of questions. The size of the agenda and elite behavior decline or increase five percentage points randomly from the previous time period.
main way we determine public preferences,\textsuperscript{11} and because of this many believe polls are an integral part of democracy.\textsuperscript{12} Thus, variations in the prevalence of polls and their coverage of the national policy agenda might affect perceptions of democratic responsiveness over time.

I expect mismatches between the polling agenda and the policy agenda. Even though pollsters may be asking more questions than ever before, I expect them to favor non-policy polls over those pertaining to policies, especially policies on the national agenda. Many commercial pollsters are preoccupied with the electoral, personal, or even quirky side of politics (Asher 2004). They are also likely to ask Americans about non-political issues (e.g., sports) or quasi-political issues off the national policy agenda (e.g., O.J. Simpson). Furthermore, since media organizations sponsor many polls and journalists often dwell on political dramas (Bennett 2005), that means polling content could be skewed in a manner that makes it harder to evaluate democratic responsiveness. So, despite the significant increases in the number of polls overall, I do not expect the number of poll questions devoted to policies to increase, especially for polls pertaining to the national policy agenda. These trends, especially in a time of poll question proliferation, should reinforce the importance of a poll sensitive measure of democratic responsiveness. Overall, responsiveness may look different once polling is taken into account.

Data and Methods

To what degree does the public policy agenda match the polling agenda? Furthermore, how do polling patterns influence our perceptions of democratic responsiveness? To address these questions, we need information on every survey question that has ever been asked.

\textsuperscript{11} As Lee (2002, 292) states, “Our academic and practical understanding of the term ‘public opinion’ has come to rest on one point: the opinion poll.”

\textsuperscript{12} As Berinsky (2004, 2) argues, “…what is not in dispute is that polls lay at the center of American politics. Polls provide the most obvious and ongoing link between citizens and their leaders. Regardless of one’s views of the polling enterprise, the fact remains that surveys have become a critical mechanism for the communication of information between the mass public and political elites.”
Unfortunately, such data do not exist. However, a close approximation is available from the poll questions that have been methodically archived at the University of Connecticut’s Roper Center for Public Opinion Research. The Roper Center claims to be “the world's largest archive of survey data” with roughly half a million poll questions (for more, see www.ropercenter.uconn.edu). The iPoll search engine at the archive shows opinion frequencies for individual questions. The analyses reported here make use of the entire iPoll database in two ways. The first is to study all questions that were asked in selected years since the late-1970s. The second uses the iPoll archive to chart public policy preferences for issues on the national policy agenda.13

Even if the number of poll questions increases dramatically over time, it might not influence perceptions of democratic responsiveness depending on the content of those questions. In other words, polling, for it to be useful from the standpoint of characterizing democratic responsiveness, must pertain to public policies. Here I analyze a subset of the Roper data. For select years since the big increase in polling in the late-1970s, I categorize the content of every question in the Roper iPoll archives. To do this, research assistants viewed every item in iPoll during three year intervals in each of the last three decades (n > 100,000).14

The first step was to classify every poll question as A) policy preference, B) no policy preference, or C) some policy content. Once all of the polls in any given year were viewed and downloaded into a database spreadsheet, an algorithm was created to pick out key words in the

---

13 The number of poll questions each month can be extracted from the iPoll database by accessing the database via the Lexis-Nexis Academic Universe system and then searching for “opinion” for any given month since all the entries have the word opinion on the page (e.g., Roper Center for Public Opinion Research). Note that new polls are continually being added to iPoll so the numbers may fluctuate from time to time. Thus, it is especially important to re-search recent years. The monthly data for the past five years were re-collected three times to account for late additions to the Roper Center collection.
14 Since the databases underlying iPoll are not publicly available, determining the distribution of policy questions relative to all other questions required thousands of hours of viewing poll questions one at a time. Since it was not possible to analyze thirty years of continuous polls, I selected three year intervals in the 1980s, 1990s, and early-2000s to provide cross-sectional data on the distribution of polls. To ensure comparability, I selected these time periods to include a presidential year, a congressional election, and a year in between without either.
question. To standardize the process, a database was created of keywords or phrases that various types of questions might contain or not contain. For example, words like “favor” or “oppose” almost always ask about policy preferences as do the words “increased, decreased, or kept about the same.” Phrases like “where would you” or “handling their job” cover non-policy items and were coded as such. Phrases like “in deciding your vote” were coded as having policy content.

For example, beginning on April 22, 1981, CBS News and the New York Times phoned a random sample of the American public to ask, “If you had a say in making up the federal budget this year, which programs would you like to see increased and which reduced?...Should federal spending on...Grants to industry to develop new forms of energy...be increased, be decreased, or kept about the same?” This question clearly concerns a policy preference. Another survey, fielded by Yankelovich, Skelly and White on March 6, 1981 asked, “Now I'd like to ask you a few questions about different groups in America....At the present time, do you come into contact with...Italians...in any of the following ways?...Have you ever had a close friend who was Italian?” This question, identified by the presence of “do you” and the lack of “favor” or “oppose,” did not concern a policy preference and was categorized as non-policy. Finally, beginning on March 30, 1992, Gallup fielded a telephone survey for Life Magazine that asked, “I'm going to read some issues. For each one please tell me whether you think it should be an extremely important priority, a very important priority, a somewhat important priority or not an important priority for the U.S. government to be concerned with right now....Defense and military policy.” This question pertained to policy, but not clearly enough to discern a policy preference. Priority questions like these, identified with the keywords of “issue,” “United
States,” and “government,” were coded as having some policy content. The Appendix provides additional examples of poll questions from the three categories in each of the decades.15

**Study I: The Distribution of Policy Questions**

One might expect a decrease in the percentage of polls devoted to public policy over time. Figure 3 confirms this intuition by showing the distribution of poll questions during three year intervals in the 1980s, 1990s, and early 2000s. There are three lines on the graph and the picture is fairly clear. Assuming these intervals are representative, the bulk of the increase in poll questions comes from the non-policy category, which is depicted in Figure 3 with solid black circles on a line. There have been large increases in the number of non-policy questions from nearly 20,000 during the first three years of the 1980s to more than 42,000 \((N=42,496)\) during a comparable three year period from 2000 to 2002. Questions pertaining to policy preferences have increased slightly in number (from 3,950 in the 1980s to 5,599 in the 1990s), but actually fell in the 2000s period by almost a thousand \((N=4,677)\). There were fewer than a thousand questions with some policy content during the 1980s and 1990s. By the early 2000s, this number had doubled, yet they still made up a small percentage (between 2 to 5 percent of all questions). On a percentage basis, upwards of eighty percent of the questions were non-policy (82 to 86 percent).

One of the most stunning trends in Figure 2 is that as a percentage of all questions, items pertaining to public policies declined from 15.6 percent in the 1980s, to 13.8 percent in the 1990s, and finally to 9.4 percent in the 2000s. Democratic responsiveness might be low in recent years, but it is harder to tell now than it was years ago.

---

15 In determining the list of the keywords, a coder picked a question at random and then tried to determine what word or phrase defined the essence of the question. A filter in the database brought up all other questions containing that same word or phrase, many times in the exact same or similar form. The words are too numerous to list, but reliability tests with a sample of questions coded by hand showed remarkable (> 80%) consistency with the computer method.
The patterns in Figure 3 are consistent with the expectation that polling behavior has changed. Even though poll questions are more numerous now than ever before, pollsters largely focus on non-policy topics.\textsuperscript{16} I will consider the implications of this finding for democratic responsiveness in a moment. At this point, however, I dive deeper into the data to consider polling on six issues--Social Security, health care, Medicare, Medicaid, abortion, and gun control--during the three year segments in the 1980s, 1990s, and 2000s. In other words, even though policy related poll questions may be scarce, it could be that some issue areas are more likely to be the subject of poll questions.\textsuperscript{17}

Figure 4 shows heterogeneity in the distributional content of polls. The number of poll question remains fairly constant for most of the six issues. Only the health care items increase dramatically, from fewer than 500 to almost 2,500 from the 1980s to the 2000s. Two health related policies, Medicare and Medicaid, also have steadily more polls in each period, although not quite at the same rate of increase. Gun control and Social Security had fewer polls in the 90s than the 80s, but more polls in the 2000s than in either of the two earlier periods.\textsuperscript{18}

The simulations presented earlier suggest that democratic responsiveness should fall as the number of poll questions rises. However, the policy areas considered here, which represent some of the most important issues in American politics, show saw-tooth patterns in all areas except health. Interestingly, health care was one area where scholars (Jacobs and Shapiro 2000) have suggested responsiveness is declining. It is the only area where the number of policy

\textsuperscript{16} Non-policy does not necessarily mean non-political as this category includes vote intentions, but votes do not easily map onto policy preferences.

\textsuperscript{17} These issues were selected due their prominence in American politics as well as the specificity and reliability of the keywords used in the issue search (i.e., “abortion” brings up abortion items, “gun” brings up gun control, etc.).

\textsuperscript{18} To be counted in each topic area, the question wording had to include “health,” or “Medicaid,” or “abortion,” etc.
questions increased, and the increase seems to have been constant since the 1980s. The fact that policy polling is more prevalent in the health arena could mean that perceptions of declining responsiveness in this issue area are related to the increasing number of opportunities for discrepancies between elite behavior and public preferences. An explicit test appears next.

**Study II: Democratic Responsiveness based upon the Policy Agenda**

My expectation was that polling behavior affects perceptions of democratic responsiveness. To consider legislative output for the proportion of the polling agenda that covers the issue agenda, I computed democratic responsiveness scores using Binder’s (2003) data from the 96th (1979-1980), the 97th (1981-1982), the 101st (1989-1990), the 102nd (1991-1992), and the 106th (1999-2000) congressional sessions. According to Binder there were 129 issues on the agenda in the 96th, 117 in the 97th, 120 in the 101st, 110 in the 102nd, and 120 in the 106th. The proportion of the national agenda with at least one policy relevant poll fell over time, from .46 during the 96th (59 out of 129 = .46) and 97th (54/117), to .5 in the 101st (60/120) to .14 in the 102nd (15/110) and .41 in the 106th (49/120). Even though the rate of legislative action on issues with and without poll data was highly similar in the 96th, 101st and 102nd (41% to 41%, 58% to 55%, and 40% to 40% respectively), in the 106th lawmakers passed far more legislation on issues that lacked public opinion data (31 out of 67 = .46) than they did on issues where opinion data existed (13 out of 49 = .27). Whether the public preferred these policies is

---

19 The national policy agenda and legislative action data were provided by Binder and they run through the year 2000. Her unit of analysis is the congressional session, which is two years (see Binder 2003 for more details). Efforts are underway to dataset through from the 103rd (2001-2002) through the 108th Congress (2005-2006).
unknown. These overall trends help set the stage for a more detailed examination of three variants of democratic responsiveness over the three time points.

The first type of responsiveness shown in Figure 5, “proactive responsiveness,” refers to instances when a majority of the public wanted change and policy changed. In the 96th congressional session, there were 59 topics on the legislative agenda where public opinion data exist (the total agenda had 129 topics with at least one NYT editorial according to Binder). Policy changed in a manner consistent with what the public wanted 11 times for an agenda weighted responsiveness rate of nearly 20 percent (.186). In that same congressional session, policy remained the same 20 times when the public preferred the status quo ([20/59]*100=33.9%). This type of responsiveness is labeled “stable responsiveness” in Figure 5. Together, public preferences prevailed 31 times out of 59, or just over half of the time ([31/59]*100=52.5%). Figure 5 shows this point as the start of the line for both forms of responsiveness.

The next congressional session that appears in Figure 5 is for the 97th, which corresponds to the years of 1981 and 1982. The whole legislative agenda contained 117 items, and public opinion pollsters asked at least one policy question on half of the issues (N=63). In this session, proactive responsiveness was about the same at .19. Stable responsiveness decreased to 37%. This means that responsiveness increased overall by a few points to .56. The trends continued in through the 101st. Given the similar size of the policy agendas where public opinion data exist, the overall pattern of responsiveness looked similar by the end of the 1980s compared to where it stood ten years prior.

They include a diverse array of topics like the war on drugs, steel import quotas, tuition tax breaks, grazing permits, high speed rail, domestic violence, repeal of the Glass-Steagall banking regulations, endangered species protection, online copyright infringement, flight caps at airports, forest firefighting, and bankruptcy laws.

The responsiveness measures in Figure 5 use averages of polls for each legislative agenda topic (also see fn. 23).
The last Congress analyzed here was the 106th in 1999 and 2000. All three lines in Figure 5 are as low or lower than they were a decade before. The public preferred and received policy change 9 times out of 49 issues on the agenda with public opinion data. That same 18% rate characterized stable responsiveness too; the public preferred the status quo 9 times out of 49 when policy did not change. Together these bring the overall level of DR during the 106th congressional session to 37% (18/49), which is the lowest of all three sessions. It provides the first confirmation that responsiveness is declining, and the figures might have been even worse had the legislative agenda with poll data available been as large as it was in the past.

These DR figures may sound low, but the graphs obscure the intensity of public opinion. Is it the case that responsiveness of either variant is especially likely on issues when the public prefers some course of action intensely? To study this question, we turn to the probit estimates in Table 1, which present the relationship between public opinion preferences (the % in favor of a policy) and responsiveness. The first term, Public Opinion, is consistently positive and significant for proactive responsiveness in models where data exist for all congresses, as well as a subset of the cases with high salience (i.e., 5 or more NYT editorials). The effect of public opinion moving from 9 to 94, which corresponds to a two standard deviation shift around a mean of 51.5, is associated with a dramatic 77 percentage point increase in the likelihood of proactive representation. The model also includes dummy variables for the various congressional sessions, all relative to the 96th, to see if the intercept or the average level of responsiveness was higher or lower in any given term. None of the congressional dummies were significant, but an interaction between the 97th and 106th Congresses with opinion suggests that the relationship between what

---

22 Although the main independent variable, Public Opinion, is in part a function of the responsiveness dependent variable(s), they are different. The correlation between opinion and proactive responsiveness is .37 and with stable responsiveness it is -.47. The objective is to determine if preference intensity and era matter for each type of responsiveness.
the public wants and proactive responsiveness declines in these periods. These patterns hold for highly salient issues, but now it is the *Opinion X 101st Congress* along with the *Opinion X 106th Congress* that are negative and significant, reaffirming that the public is less apt to get what it wants in the later period.²³

Insert Table 1 here.

The second part of Table 1 presents the findings for stable responsiveness. Here the coefficients for public opinion are negative and statistically significant (*p* < .01). The same two standard deviation change in public opinion increases the likelihood of stable responsiveness by 70 percentage points on average and holding all else constant (from .03 [.00 to .11] to .73 [.45 to .91]. The negative sign on the *Public Opinion* coefficient makes sense. As support for a policy drops, it leads to more stable responsiveness (i.e., no change in the status quo). The 101st congress had a lower level of stable responsiveness given the significant dummy term. On the other hand, the 102nd and 106th had more, again all relative to the 96th. The interactions between the 102nd and 106th with opinion were significant. Stable responsiveness was especially unlikely during the 1991-1992 and 1999-2000 legislative sessions. For the most part these patterns also characterized highly salient issues. The *Public Opinion* term is still negative and significant, but the 106th had no instances of stable responsiveness on these highly salient issues so the dummy variable and interaction drop out of the model. These patterns suggest a relationship between public opinion and policy on issues where survey data exist, but what about responsiveness across the entire legislative agenda? For that we turn to the next set of estimates.

²³ The unit of analysis for these analyses is an opinion-policy pair. Since issues could have more than one poll, the models employ clustered standard errors to account for the lack of independence. These findings hold in analyses using an average of the polls instead of each poll (i.e., only one entry per agenda issue).
Opinion-Policy

Table 2 presents the relationship between public opinion and policy output, the passage of an issue on the national legislative agenda.\textsuperscript{24} In the first set of estimates, the connection between public opinion and policy disappears. The coefficient is positive, but the standard error is too large for statistical significance (p = .12). However, the Public Opinion term is significant for the high salience issues in the second column of Table 2 (coeff. = .02, s.e.=.01, p < .01). Over the range of public opinion, the likelihood of policy passage rises from .13 [.04 to .33] to more than .87 [.55 to .99] holding all else constant and at the mean. The relationship between public opinion and public policy seems especially strong on highly salient issues from the legislative agenda.

Insert Table 2 here.

Because we have complete data on both the size and legislative history for the agenda items, it is possible to include a term for Missing Public Opinion data.\textsuperscript{25} A significance test of this term considers whether policy passage is more likely on issues that lack opinion data. Across both specifications, the coefficient is positive but insignificant. The presence or absence of opinion measures is related to whether or not Congress and the President enact legislation. The .55 coefficient for Public Opinion Missing is statistically significant (p < .10). It corresponds to an increase in the likelihood of passage from .34 [.24 to .45] to .55 [.40 to .70].

The dummy variables for the 101\textsuperscript{st} are positive and significant, indicating that a higher proportion of legislation passed in this session. Even though Public Opinion is insignificant on

\textsuperscript{24} The unit of analysis is the opinion-policy agenda topic item pair. As with the analyses in Table 1, any given item pair could have more than one poll associated with it (e.g., there were 20 separate poll questions devoted to a tax on windfall profits for the oil companies during the 1979-1980 congressional session). To account for the lack of independence across the multiple entries, the standard errors were clustered by agenda topic in each session.

\textsuperscript{25} Any agenda topic without public opinion data is given a unique value (zero) in the Public Opinion series. A new dummy variable called Public Opinion Missing identifies these cases (1=missing). For others using this technique to retain cases with missing responses on income, ideology, and other factors, see Berinsky (1999) or Mondak (2000).
its own in the model with congressional data from 1979-80, 1989-90, and 1999-2000, the interaction of this term with the 106th congress shows that, relative to the late-1970s, when the public increasingly favors a policy it is less likely to be enacted (coeff. = -.02, s.e.=.01, p < .01).

This pattern shows up in the highly salient issues too. The interaction between opinion and the 106th is negative and significant, as is the interaction with the 101st. Public Opinion, especially on salient issues, is a strong negative predictor of whether or not legislation from the national agenda passes. These patterns confirm what others have found regarding the decline in democratic responsiveness since the 1970s even after controlling for the availability of public opinion data.26

**Conclusion**

How well does democracy work in the United States? Answers vary, but the general trend seems to be movement in the wrong direction from the standpoint of democratic theory. However, democratic responsiveness scores depend on the availability of polling data. The irony is that even though polls are more prevalent now than ever before, they are less informative from the standpoint of measuring democratic responsiveness. Fewer questions pertain to policy because pollsters devote a huge proportion of their questions to non-policy issues. Responsiveness appears to be declining, but this could have been the case because pollsters fail to ask pertinent policy questions. Once I account for changes and the distribution of poll questions, responsiveness appears to be low and trending downward.

Every so often researchers re-evaluate survey methods (Krosnick and Fabrigar, n.d.; Smith 1987) as well as the strength of evidence on the opinion-policy linkage (see Manza and Cook 2002a; 2002b; Burstein 2003). Distilling democracy to a single number glosses over some important trends. Yet, like controversies in legislative gridlock (Binder 1999; Mayhew 1991) or

---

26 A term counting the number of NYT editorials as an indicator of salience is positive but insignificant ($p > .55$).
turnout statistics (McDonald and Popkin 2001), what goes into the denominator influences judgments on key statistics regarding the health of democracy in America.

There, of course, are limitations to this study. Chief among them are my reliance on data from the Roper Center collection. The iPoll database is widely recognized as the world’s largest repository of public opinion questions, but it does not contain all polls ever asked. In fact, the Roper data do not incorporate the private polls that politicians conduct (e.g., Druckman and Jacobs 2005; 2006), which are highly relevant from the standpoint of assessing democratic responsiveness. Another limitation concerns my operationalization of the national policy agenda, which is based upon editorials of one major newspaper. One could envision alternative ways to operationalize the issue agenda (e.g., public issue salience, congressional hearings, etc.) which might influence the results. Similarly, I have concentrated on particular years and particular issues, the selection of which was representative but not random. Nevertheless, the patterns indicate that democratic responsiveness is declining, at least in the data analyzed so far, but our growing ability to detect those changes should be of equal or greater concern.

These are worries that should inform future research, but before concluding it is important to comment on two other methodological points which often plague the opinion-policy responsiveness literature. The first issue is causality. It is difficult to determine whether opinions influence public policy or if the reverse is more likely to be true (Page 1994). Historical and archival research has been helpful (Druckman and Jacobs 2005; 2006). Time-series analyses also tell us a lot (Wlezien 2004). Issues like causality deserve and have received more attention elsewhere (e.g., Hill and Hinton-Anderson 1995; Kuklinski and Segura 1995; Page 1994; 2002; Wlezien 1995). However it is important to note that the purpose of this study has not been to explore the causes of variations in democratic responsiveness. In fact, the way that the data are
aggregated over two-year intervals complicates causal claims, and agenda items that Congress fails to address in one session are sometimes passed in subsequent terms. Efforts are underway to tackle these and related endogeneity issues. Until then, however, the point is that the proverbial Achilles’ heel of the democratic responsiveness literature is its reliance on public opinion data.

The increasing availability and use of public opinion surveys has not gone unnoticed (Geer 1996; Herbst 1993) or without criticism (Berinsky 2004; Blumer 1948; Bourdieu 1979; Fried 2006; Rogers 1949). Works like these help us circle back to a second important methodological issue with philosophical roots. Thousands of polls studied here contained some policy content, but many could not be linked to a particular legislative agenda item so they were not counted in the responsiveness equation. Scholars who study aggregate responsiveness with global policy mood (Stimson, MacKuen, and Erikson 1995) sidestep some of these data problems by putting opinions and policy on liberal-conservative continua. But even macroscopic works endorse, at least in part, survey research as we have known it.

Although technological developments have made polling harder now, surveys are likely here to stay in one form or another (Asher 2004). The issue then becomes not polls but the policy items in particular. More policy questions might not be the answer. For instance, in his review of the opinion-policy congruence studies underlying much of the democratic competence literature, Scott Althaus (2006) writes that “Congruence acquires whole new dimensions when citizen input takes the form not just of expressing policy preferences that representatives can choose to legislate or ignore, but of deciding the ends of politics, identifying problems requiring political action, and delimiting the core values that should organize political decision making.” Althaus adds that taking these points to heart “…would require developing new instrumentation for survey research, and perhaps even new methods for operationalizing citizen input” (p. 102-3). In
this study, citizen input means survey questions on policy items, particularly topics from the national legislative agenda. Ironically, policy questions tend to be falling out of favor even as other types of poll questions proliferate. The trends are unlikely to change and scholars investigating the connection between leaders and the public in modern democracies should consider inventing new measures of representation to supplement important indicators like democratic responsiveness.
Appendix:
Examples of Policy, Non-Policy, and Policy Content Poll Questions

Policy Poll Questions
*Gallup, Personal, N=1535, June 26, 1981:* “Do you think the sale of cigarettes should or should not be banned completely?”

*Gallup, Telephone, N=1012, Oct. 25, 1990:* “Congress and the President have recently agreed upon a new federal budget plan. The new plan will increase taxes on the wealthy, increase the gasoline tax by 5 cents per gallon, raise taxes on cigarettes and alcoholic beverages, place a luxury tax on expensive boats, cars, jewelry and furs, raise taxes on airline tickets, and increase the amount of income which is subject to the Medicare tax. Congressional leaders and the administration say these new taxes are necessary to reduce the federal deficit. Overall, do you favor or oppose this new plan?”

*International Communications Research, Telephone, N=1,006, July 27, 2001:* “(Some public schools have a so-called zero tolerance policy on drugs, which means that students found with alcohol or drugs of any kind in school will be automatically suspended.) Would you favor or oppose making an exception to such a zero tolerance policy (in the public schools in your community) for aspirin, asthma drugs, or other medicines that a student needs?”

Non-Policy Poll Questions
*Roper Organization, Personal, N=2,000, Nov. 8, 1980:* “Would you say that you have recently been taking a good deal of interest in current events and what's happening in the world today, some interest, or not very much interest?”

*Gallup, Telephone, N=1,010, July 9, 1992:* “(All three presidential candidates (1992) have appeared on television outside the regular newscasts--on programs such as the Today Show, Larry King Live, Donahue and 20/20--for longer, more in-depth discussions and interviews. For each candidate, please tell me if seeing him on these programs made your opinion of him more favorable or less favorable--or if you haven't seen him on these programs.)... Ross Perot.”

*Gallup, Telephone, N=1,015, January 7, 2002:* “Right now, do you think that economic conditions in the country as a whole are getting better or getting worse?”

Policy Content Questions
*Yanelovich, Skelly, and White, Personal, N=1644, August 26, 1980:* “In the 1976 Presidential election, did you vote for Gerald Ford the Republican, or Jimmy Carter the Democrat, or didn't you vote that year?”

*ABC News/Washington Post, Telephone, N=1215, March 1, 1991:* “Do you think the Congress is able to deal with the big issues facing this country, or not?”

*Techno Metrica Institute of Policy and Politics, Telephone, N=900, December 2, 2002:* “(Okay, and now for the next few questions, I'd like you to rate President (George W.) Bush performance so far on handling different issues. We'll use the familiar letter grading system from A through F, where A is excellent, B is good, C is average, D is poor and F is a failing grade. Okay?) How would you grade his performance... in handling foreign affairs?”
References


Table 1. The Relationship between Public Opinion and Democratic Responsiveness

<table>
<thead>
<tr>
<th></th>
<th>Proactive Responsiveness</th>
<th>Stable Responsiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Opinion &amp; Policy Change)</td>
<td>(Opinion &amp; Policy Status Quo)</td>
</tr>
<tr>
<td></td>
<td>Full Congress&lt;sup&gt;a&lt;/sup&gt;</td>
<td>High Salience Only&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Public Opinion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97th Congress (1981-1982)</td>
<td>.04 ***</td>
<td>.05 ***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>101st Congress (1989-1990)</td>
<td>.57</td>
<td>-.02</td>
</tr>
<tr>
<td></td>
<td>(.57)</td>
<td>(.76)</td>
</tr>
<tr>
<td>102nd Congress (1991-1992)</td>
<td>1.13</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>(.84)</td>
<td>(.86)</td>
</tr>
<tr>
<td>106th Congress (1999-2000)</td>
<td>.93</td>
<td>-.52</td>
</tr>
<tr>
<td></td>
<td>(.79)</td>
<td>(.68)</td>
</tr>
<tr>
<td>Opinion X 97th Congress</td>
<td>-.02 *</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>Opinion X 101st Congress</td>
<td>-.01</td>
<td>-.02 *</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>Opinion X 102nd Congress</td>
<td>-.01</td>
<td>-.01</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.02)</td>
</tr>
<tr>
<td>Opinion X 106th Congress</td>
<td>-.03 ***</td>
<td>-.03 ***</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.19 ***</td>
<td>-2.80 ***</td>
</tr>
<tr>
<td></td>
<td>(.49)</td>
<td>(.52)</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-546.17</td>
<td>-271.78</td>
</tr>
<tr>
<td>N</td>
<td>1,425</td>
<td>771</td>
</tr>
</tbody>
</table>

Note: The table displays probit coefficients with clustered robust standard errors in parentheses. The dependent variable is democratic responsiveness with a value of 1 for instances of opinion supporting change and actual policy change (Opinion & Policy Change) or opinion supporting the status quo and no policy change (Opinion & Policy Status Quo). All dummy variables and interactions are relative to the baseline category of the 96th Congress.

<sup>a</sup> = Issues with at least one New York Times editorial.

<sup>b</sup> = Issues with 5 or more New York Times editorials.

<sup>c</sup> = terms drop due to lack of variation (zero successes; all failures).

*** p < .01; ** p < .05; * p < .10 (two-tailed).
<table>
<thead>
<tr>
<th></th>
<th>Full Congress(^a)</th>
<th>High Salience Only(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Opinion</td>
<td>.01 (.01)</td>
<td>.02 *** (.01)</td>
</tr>
<tr>
<td>Public Opinion Missing</td>
<td>.55 * (.29)</td>
<td>.84 (.56)</td>
</tr>
<tr>
<td>97th Congress (1981-1982)</td>
<td>.08 (.36)</td>
<td>.41 (.87)</td>
</tr>
<tr>
<td>101st Congress (1989-1990)</td>
<td>.86 ** (.37)</td>
<td>2.32 ** (.96)</td>
</tr>
<tr>
<td>102nd Congress (1991-1992)</td>
<td>-.11 (.28)</td>
<td>-.85 (.77)</td>
</tr>
<tr>
<td>106th Congress (1999-2000)</td>
<td>.08 (.28)</td>
<td>1.55 (1.11)</td>
</tr>
<tr>
<td>Opinion X 97th Congress</td>
<td>-.01 (.01)</td>
<td>-.02 (.01)</td>
</tr>
<tr>
<td>Opinion X 101st Congress</td>
<td>-.01 (.01)</td>
<td>-.03 ** (.01)</td>
</tr>
<tr>
<td>Opinion X 102nd Congress</td>
<td>.00 (.01)</td>
<td>.01 (.02)</td>
</tr>
<tr>
<td>Opinion X 106th Congress</td>
<td>-.02 ** (.01)</td>
<td>-.05 *** (.02)</td>
</tr>
<tr>
<td>Constant</td>
<td>-.80 ** (.35)</td>
<td>-1.29 *** (.50)</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-1088.66</td>
<td>-412.19</td>
</tr>
<tr>
<td>(N)</td>
<td>1,781</td>
<td>789</td>
</tr>
</tbody>
</table>

*Note: The table displays probit coefficients with clustered robust standard errors in parentheses. The dependent variable is policy output value of 1 for instances of legislative success on an issue from the national policy agenda. All dummy variables and interactions are relative to the baseline category of the 96th Congress.

\(^a\) = Issues with at least one *New York Times* editorial.

\(^b\) = Issues with 5 or more *New York Times* editorials.

*** \(p < .01\); ** \(p < .05\); * \(p < .10\) (two-tailed).
Figure 1. The Proliferation of Poll Questions: 1936 – 2006

Note: Data from the iPoll archive at the Roper Center for Public Opinion Research
Figure 2. Simulations of Democratic Responsiveness with Changes to the Number of Poll Questions, the Policy Agenda, and Policy Output

Panel A. Constant Changes to Opinion, Policy, and Agenda Series

Panel B. Random Shocks to Opinion, Policy, and Agenda Series
Figure 3. The Increase in Non-Policy Poll Questions from 1980 to 2002
Figure 4. Policy Poll Questions on Six Issues from 1980 to 2002

Number of Poll Questions

1980-82 1990-92 2000-02

Health Care
Social Security
Abortion
Gun Control
Medicare
Medicaid
Figure 5. Democratic Responsiveness in the 96th, 101st, and 106th Congresses