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## *Problem Solving and the Demand for Expert Information in Congress*

This article examines the relationship between demand for expert information from members of the US Congress and increased issue salience in the public. As problems become salient, policymakers should seek out expert information to define problems and identify effective policy solutions to address those problems. Previous work on elite mass public representation and government problem solving has relied on public actions by elected officials to evaluate this relationship. We rely instead on new data on the policy content of privately requested reports from the Congressional Research Service (CRS) from 1997 to 2017. We find strong evidence that members consult experts when issues become salient, even when controlling for legislative agendas.

In a 2017 survey, policy analysts working with the federal government were most likely to blame poor congressional performance on “making evidence-based decisions” (Patashnik and Peck 2017). As an inherently political, rather than technical, institution, Congress is not designed to process information like a policy analyst. Yet, members of Congress are often incentivized to gather and consider expert information. Members accumulate specialized knowledge via their committee service often due to the expertise they are provided by expert witnesses and policy analysis conducted by committee staffers (Curry 2019; Gilligan and Krehbiel 1990; Hall 1996; Krehbiel 1991). Constituents expect their members to utilize this information to effectively solve problems as they emerge (Adler and Wilkerson 2013; Jones and Baumgartner 2005). Congress may not be a technical institution, but technical expertise plays an important role in its decision-making process.

Legislators respond to changes in public concern for policy problems by shifting government attention to salient problems (Adler and Wilkerson 2013; Jones and Baumgartner 2005). However, shifting congressional attention to a problem—which

members often do based on their committee appointments or constituency's characteristics (Hall 1996; Woon 2009)—and solving that problem are not one in the same. To actually solve it, legislators must seek out and listen to information from experts to define problems, construct policy alternatives, and ultimately enact a policy change (Baumgartner and Jones 2015). If they do not seek out expertise, they are unlikely to achieve the goals tasked to them by their constituents. Complex problems are often elusive, and members may not even understand the nature of the problem itself, much less be aware of an effective solution (Baumgartner and Jones 2015). While scholars consistently find that legislative attention rapidly shifts toward the most salient problems facing a country (Jones and Baumgartner 2005), the extent to which legislators consult expertise in order to address salient problems remains largely unexplored.

We examine the extent to which elected policymakers seek out privately requested expert information in response to increased issue salience. To do so, we analyze demand for expert policy information from the Congressional Research Service (CRS) by members of the US Congress. The CRS produces expert reports on a wide range of issues from nonpartisan experts in response to requests from members of Congress. Until recently, these reports were not publicly available, so members had little reason to submit requests other than to seek out expert information. If members do seek out expert information in response to policy problems, they should request more information as those issues become more salient in an effort to resolve policy problems and avoid blame from their constituents. Moreover, our research design allows us to more precisely pinpoint the problem-solving intentions of members of Congress, especially as contrasted with less sincere attempts at addressing issues such as the mere introduction of a bill that likely has little to no chance of moving through the legislative process.

The article proceeds as follows. In the first section, we discuss the debate around Congress' relationship with problem solving, representation, and expert information. We argue that policymakers intentionally shift their attention toward emerging problems, even when those actions are not visible, seek out expert information, and then use that information to inform their decision-making. In the next section, we propose a research design to examine demand for expert information in the US Congress. We introduce new data on the policy content of 13,536 reports by the Congressional Research Service from 1997 to 2017. By coding

these data using the Policy Agendas Project<sup>1</sup> content analysis system, we are able to make valid comparisons between outputs such as CRS reports, congressional hearings, and public issue priorities. We propose an error-correction model to dynamically analyze the relationship between changing demand for expert information and issue salience. Next, we present results, finding a strong and robust relationship between demand for expert information and issue salience. In the final section, we conclude and discuss the implications of our findings.

### **Representation, Expert Information, and Policymaking in the US Congress**

While some political institutions, such as professional bureaucracies, are constructed to encourage evidence-based decision-making, democratic legislatures are not. Elected officials and legislative parties balance political, policy, and career concerns with every decision they make (Fenno 1973; Mayhew 1974). They are not required to consult with the most qualified experts on any given matter and indeed will sometimes choose to only listen to those who share their preferences (Rich 2005), although they do consult committee chairs, staffers, or other senior members of Congress who are known to have significant expertise in the respective issue area (Box-Steffensmeier, Ryan, and Sokhey 2015; Curry 2019; DeGregorio 1994). Members often require expertise in order to achieve their goals through participation in committee work as policy entrepreneurs. They participate at the committee stage to build their reputations as policymakers, claim credit for policy achievements, and pursue issues of personal interest (Hall 1996). Congress establishes committees in part to allow members to develop specialized expertise on issues (Gilligan and Krehbiel 1990). Committee members invest significant time, staff, and other resources to build expertise on their issues (Wawro 2010). On most issues, policymaking requires this significant technical expertise to define problems and identify effective solutions to those problems (Workman 2015).

Members also require expertise when representing their constituents. Responding to constituents is a core responsibility for members, and we know that they conceptualize and perceive their constituencies in a variety of different ways (Bernhard and Sulkin 2018; Fenno 2003; Grimmer 2013; Miller 2010). Elected officials' responsiveness to their constituents' preferences is consistently

documented by scholars (Broockman 2016; Butler and Nickerson 2011; Canes-Wrone, Brady, and Cogan 2002; Miller and Stokes 1963; Theriault 2005; Weissberg 1978). One way they are able to be responsive is by gaining expertise from official policy advisory organizations like the Congressional Research Service about pressing policy problems.<sup>2</sup> Moreover, members generally associate responsiveness to service requests as being a boost to their electoral chances (Ashworth and Bueno De Mesquita 2006; Cain, Ferejohn, and Fiorina 1987) or even as a way to gain trust with their constituents in order to pursue their own policy goals (Butler, Karpowitz, and Pope 2012). These requests may also alert a member to a pressing policy problem that is local to their district or state. Sometimes members might even request expert information in response to issues highlighted by their challengers in electoral campaigns (Sulkin 2005, 2011). In order to effectively respond to constituent requests, offices may need to understand a wide range of often technical issues and agency processes, which the CRS can synthesize for them.<sup>3</sup>

Finally, members must engage with expertise when conducting oversight. Congressional resources are increasingly devoted to overseeing and directing executive-branch policymaking (Jones, Theriault, and Whyman 2019; Lewallen 2020; Workman 2015). Oversight is less driven by ideological concerns than legislating, opening up more room for expert information to influence the policy process (Lowande 2018). Bureaucrats develop considerable expertise on issues through day-to-day administration (Gailmard and Patty 2013). While members often rely on bureaucrats as a source of expertise while legislating (Mills and Selin 2017; Workman 2015; Workman, Shafran, and Bark 2017), effective oversight requires expertise that is independent from its subjects.

Members search for expert information due to any of the incentives just outlined, but they are all united by the same underlying goal of seeking to solve the most urgent issues in the minds of the mass public and their individual constituents. The public often holds double-peaked policy preferences, where they prefer that their elected officials “do something” to solve pressing problems regardless of the location of policy alternatives in ideological space (Adler and Wilkerson 2013; Egan 2014). Indeed, studies show that the representation of public priorities drives much of the policy agenda of government (Bevan and Jennings 2014; Jones, Larsen-Price, and Wilkerson 2009) and failure to solve a problem,

as opposed to just shifting their attention to it, often results in blame from angry constituents (Weaver 1986).

The problem-solving model just described, developed by Baumgartner and Jones and their colleagues, places expert information at the center of policymaking decisions by elected officials. In developing this model, Baumgartner and Jones (2015) propose two different search processes for policymakers to utilize: entropic and expert search. Because organizations and individuals have limited information-processing resources, any search is costly. Entropic search refers to a constant, shallow process where policymakers look for problems that will require their increased attention (Boydston 2013; McCubbins and Schwartz 1984). Once a problem is identified, policymakers engage in a more detailed, high-effort expert search to more effectively define the policy problem and further investigate potential solutions to said problem. These search processes do not always occur at the same rate, however. During times of crisis, for example, members tend to consume more information from policy experts (Shafran 2015). Much of this information is derived from career bureaucrats, who assist in both problem definition and the construction of policy solutions (Workman 2015; Workman, Jones, and Jochim 2009; Workman, Shafran, and Bark 2017). And in less pressing times, or when the public is inattentive to policymaking, elected officials may desire effective public policy for its own sake given their own senses of duty or purpose (Fenno 1973).

The problem-solving model therefore predicts a clear order of events: issues become more salient as problems become more severe, policymakers observe the issue salience and search for expert information, and then they use the expert information in policymaking. Scholars have examined the relationship between the first and last steps of this process extensively. Legislatures and political parties in Western democracies respond to increased issue salience by diverting government attention toward more salient issues (Benefiel and Williams 2019; Bevan and Jennings 2014; Fagan 2018; Jones and Baumgartner 2005; Jones, Larsen-Price, and Wilkerson 2009). Government is more responsive to public preferences when issue salience is high (Soroka and Wlezien 2010). However, the middle step is less studied. Baumgartner and Jones (2015) theorize that expert search should occur after policymakers are alerted to the problem, but they do not test a hypothesis. Given the importance of selecting effective policy alternatives in

the problem-solving model, the model is incomplete without such a test.

### **Research Design**

To examine the relationship between changes in issue salience and expert information, we observe demand from members of Congress for expert information from the Congressional Research Service (CRS). This section proceeds as follows. First, we review the literature on the role of the CRS in congressional policymaking, finding that it is a particularly strong test case to observe demand for expert information. Next, we present new data on the policy content of 13,536 policy reports written by CRS from 1997 to 2017 coded using the Policy Agendas Project topic coding system and briefly explore the dataset's descriptive characteristics. Finally, we propose a time-series cross-sectional model of demand for expert information from members of Congress.

#### *Expert Information from the Congressional Research Service*

In 1914, members of Congress chose to designate a special reference unit within the Library of Congress charged specifically with responding to congressional requests for policy information (Brudnick 2008). These analytical bureaucracies are common features of legislatures. Many US states, such as Florida, Maine, Maryland, Michigan and Wyoming, have some division of legislative services to provide expert information. Large US cities such as New York and Los Angeles have divisions issuing expert reports in either legislative services departments or some other city-level government division. And, the parliaments of the United Kingdom, Canada, Australia, Germany, New Zealand, and countless other countries all have formal libraries, often established sometime in the nineteenth century, with staffers offering expert analysis to members of their legislature. These independent analysts persist globally and locally within democratic institutions and are playing an important information-processing role (Campbell and Pedersen 2014).

The Congressional Research Service (CRS) has existed in its current form since 1970, but it is inextricably linked to its predecessor, the Legislative Reference Service (Brudnick 2008). While its predecessor was mainly in charge of providing facts and analyses conducted externally, when the CRS was reformed in 1970, its

increased resources were allocated for original research and analysis to directly aid members in their work throughout the legislative process (Brudnick 2008). In its current form, it is devoted explicitly to supporting members of Congress by privately providing nonpartisan “reports, memoranda, customized briefings, seminars, videotaped presentations, information obtained from automated data bases, and consultations in person and by telephone” (Brudnick 2008, iv). In this way, it provides both a source of nonpartisan information that could be used to contrast competing information coming from other sources and a research unit wherein members can request original analysis and interpretations of policy proposals, legislation, or academic research.

The CRS as an institution is designed to solve what Jones and Baumgartner (2005) call the index-construction problem. This problem occurs when information from multiple sources and about diverse issues need to be combined and weighted in order to make a final policy choice. The problem is twofold; policymakers must first decide how to choose which problem to address and then decide how to weigh and combine those various sources of information. Expert analysis is useful for breaking down a policy problem and examining its component parts to refine one’s understanding (Baumgartner and Jones 2015). Thus, members demand expert information after an increase in salience because they are considering taking further legislative action on the given issue. Moreover, this signals further that members are likely intending to weight such information heavily in policy-solution deliberations due to the CRS’ utility as nonpartisan and private producer of information.

CRS reports are a particularly useful output to test demand for expert information for two reasons. First, CRS produces information in response to or in anticipation of member requests (Brudnick 2008). Members of Congress are oversupplied with policy information from external sources who seek to influence their decision-making (Jones and Baumgartner 2005). Because their cognitive and physical resources to process information are limited, they frequently have much more information to consider than they are capable of processing and must choose which information receives their attention and which they can ignore. Thus, we can infer congressional demand for expert information on an issue by observing new information produced by CRS on it because they are unlikely to actively request information from CRS that they expect to ignore. Second, until recently, CRS reports

were not officially available to the public. While individual reports made their way into the public record, no comprehensive database of reports was available. Congress has its own internal database where all CRS reports can be downloaded, but these files were neither accessible nor subject to Freedom of Information Act (FOIA) requests. This restriction is, of course, unsurprising given that the nature of the relationship between the CRS analysts and the requesting member has been described as being “akin to that between an attorney and his or her client in American legal practice” (Relyea 2012, 276). Thus, member requests for expert information from CRS could not be performative. Members who seek to hijack a salient issue in order to pass their pet projects may want to be seen consulting experts before diverting the agenda to some previously planned policy alternative but are unlikely to do so by requesting information that is not available to the public. Therefore, if we infer demand for expert information from the CRS, we can assume that demand represented genuine interest in the advice of experts on the issue.

Two recent developments changed the private status of CRS reports. First, Congress passed a law requiring that all CRS reports be placed into a searchable database on [Congress.gov](http://Congress.gov).<sup>4</sup> However, this database contains no version history, little metadata and no comprehensive list of every CRS report issued. Second, shortly before this new law was enacted, a nonprofit organization called Demand Progress worked with individual members of Congress to download and catalogue all CRS reports on the internal congressional database. The resulting website, [EveryCRSReport.com](http://EveryCRSReport.com), created a better database, with a comprehensive list of all reports, revision history, and metadata. Thus, we chose to use [EveryCRSReports.com](http://EveryCRSReports.com) to collect the reports, rather than the official database.

Using both the API and a scraping program, we collected report titles, summaries, unique identifiers, dates, and all available metadata for each report on [EveryCRSReport.com](http://EveryCRSReport.com) from 1997 to 2017. This process yielded 13,536 reports. Box 1 shows an example of one CRS report from 2017 titled, “Frequently Asked Questions About Prescription Drug Pricing and Policy.” We then categorized the policy content of each report using the Policy Agendas Project (PAP) topic coding system. Two trained research assistants read each report title and summary. They then assigned the report to one of 20 major topics and 221 subtopics.<sup>5</sup> When they disagreed, a third trained coder broke the tie and assigned a subtopic code to



**Box 1** Congressional Research Service Report Title and Summary Example<sup>8</sup>

Frequently Asked Questions About Prescription Drug Pricing and Policy

May 2, 2017

Prescription drugs play an important role in the U.S. health care system. Innovative, breakthrough drugs are providing cures for diseases such as hepatitis C and helping individuals with chronic conditions lead fuller lives. Studies show that prescription drug therapy can produce health care savings by reducing the number of hospitalizations and other costly medical procedures.

Congress and presidential administrations have attempted to ensure that Americans have access to pharmaceuticals by enacting the Medicare Part D prescription drug benefit as part of the Medicare Modernization and Prescription Drug Act of 2003 (MMA; P.L. 108–173) and expanding drug coverage under the 2010 Patient Protection and Affordable Care Act (ACA; P.L. 111–148, as amended). Congress also has enacted laws to encourage manufacturing of lower-cost generic drugs, as well as cutting-edge biologics and biosimilars.

Americans are using more prescription drugs, and for longer periods of time, than in past decades. Still, access to prescription drugs remains an issue for a number of consumers, particularly those without insurance; those prescribed expensive specialty drugs for treating serious or rare diseases; or those enrolled in private insurance or public health plans with high cost-sharing requirements, such as drug deductibles and coinsurance.

Prescription drug affordability has gained renewed attention during the past few years as retail drug spending has risen at the fastest pace in more than a decade—growing 12.4% in 2014 and 8.9% in 2015 before slowing to a 1.3% increase in 2016. There are several reasons for the recent volatility in drug spending. Manufacturers have been introducing new drugs at a record rate and raising prices for many existing brand-name products. The introduction of new hepatitis C drugs at the end of 2013 had a major impact on total drug spending in 2014 and 2015. At the same time, fewer brand-name drugs have lost patent protection than in previous years, resulting in less impact from the use of lower-cost generic substitutes. The Centers for Medicare & Medicaid Services (CMS) forecasts that retail drug spending could average 6.3% annual growth from 2017 to 2026. Although that growth rate would be a reduction from the average level of the past several years, CMS expects retail drug spending to increase faster than other areas of medical spending in this 10-year period.

This report will address frequently asked questions about government and private-sector policies that affect drug prices and availability. Among the prescription drug

topics covered are federally funded research and development, regulation of direct-to-consumer advertising, legal restrictions on reimportation, and federal price negotiation. The report provides a broad overview of the issues as well as references to more in-depth CRS products. The appendix provides references to relevant congressional hearings and documents (see Appendix A).

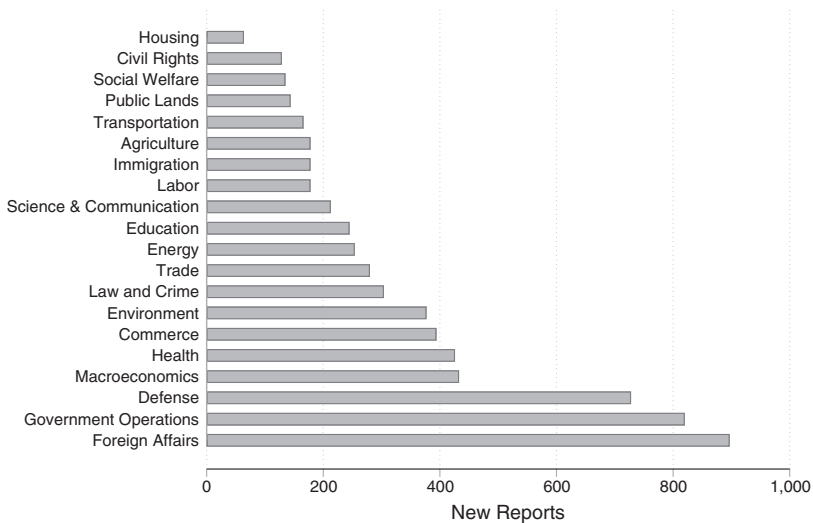
the observation.<sup>6</sup> In the Box 1 example, they assigned the report to the prescription drug coverage and pricing subtopic in the health-care major-topic area. Figure 1 shows the distribution of reports across policy topics. Many CRS reports are frequently updated and revised. Some of these revisions are minor, while others are near-total revisions of the original report. Figure 2 shows the percentage of attention in both revisions and new reports over time.<sup>7</sup>

### *Independent Variables*

To measure the salience of policy problems, we use existing data in the percentage of respondents who named items coded into each major policy topic as the “Most Important Problem” facing America in open-ended Gallup surveys from the Policy Agendas Project. These data have been used by numerous agenda-setting scholars to measure changes in public concern across issues (Baumgartner and Jones 2015; Benefiel and Williams 2019; Bevan and Jennings 2014; Bevan, Jennings, and Pickup 2019; Fagan 2018; Froio, Bevan, and Jennings 2017; Jones and Baumgartner 2004; Jones, Larsen-Price, and Wilkerson 2009). When policy problems become more salient, citizens are more likely to express concern about related issues when asked what is the most important problem facing their country. When public concern for a policy problem increases, we expect members to demand increased expert information on those issues, which we observe when the CRS will produce more reports on it.<sup>9</sup>

We also include media attention as an alternative specification for issue salience. Media organizations both monitor the environment for potential policy problems and sound the alarm when problems become most severe (Boydston 2013; Wolfe 2012). As problems become more salient, media attention to the issue will increase. Media attention can itself cause public concern about issues to increase, but it can also increase independently of MIP. One concern when using MIP as a measure of issue salience is that it asks respondents to name

FIGURE 1  
Total New Unique CRS Reports by Policy Area, 1997–2017

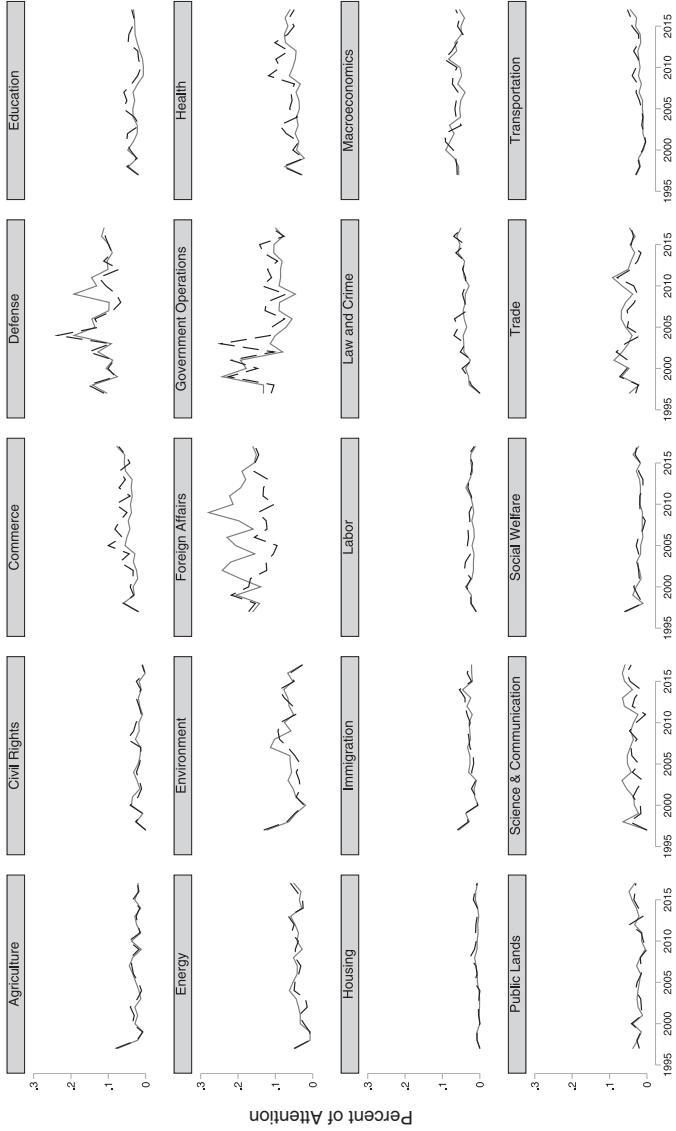


Note. Figure 1 shows the total number of new CRS reports coded into each major policy topic using the Policy Agendas Project codebook.

a single issue that is most important. Thus, it fails to capture the variation in the salience of issues that rise in importance, but that fail to rise to status as the most important (Wlezien 2005). Media attention is much less supply constrained and thus can capture smaller shifts in issue salience. We measured media attention using the *New York Times Index* dataset from the Policy Agendas Project. These data measure the policy content of a sample of *New York Times* policy-relevant stories that involve from 1997 to 2016.<sup>10</sup>

We also control for other types of legislative agendas. Elected officials may request expert information from the CRS in response to active legislation or oversight, rather than public priorities. Because these activities may themselves be driven by increased issue salience (Jones et al. 2009), they represent a potential confounding variable if omitted. We include two independent variables to control for the legislative agenda using data from the Policy Agendas Project. First, to capture legislative activity, we include the percentage of roll-call votes on each major topic area from both chambers of Congress. Second, to capture both legislative activity but also nonlegislative activity, we include the percentage of hearings on each major topic area from both chambers of Congress.

**FIGURE 2**  
**Attention to Issues in New and Revised CRS Reports, 1997–2017**



*Note:* Figure 2 shows the annual percentage new CRS reports coded into each major policy topic using the Policy Agendas Project codebook.

*Model*

To examine the relationship between issue salience in the broader public and information demand from members of Congress, we use an error-correction time-series cross-sectional model, where the panel unit is each Policy Agendas Project major topic ( $n = 20$ ), and the time unit is year ( $n = 21$ ) (see Equation 1). Time-series cross-sectional models are frequently used by agenda-setting scholars to examine the dynamic relationship between attention to policy in different policy outputs (Bevan and Rasmussen 2020; Fagan 2018; Froio, Bevan, and Jennings 2017; Green and Jennings 2017; Green-Pedersen and Mortensen 2010; Lovett, Bevan, and Baumgartner 2015; Mortensen et al. 2011). The error-correction model allows us to identify the short-term and long-term relationship between issue salience and demand for expert information.

$$\Delta \text{CRS}_{it} = \text{CRS}_{it-1} + \Delta \text{MIP}_{it} + \text{MIP}_{it-1} + \Delta \text{NYT}_{it} + \text{NYT}_{it-1} + \text{Controls} + \epsilon \quad (1)$$

**Results**

Our results find a consistent short-term relationship between demand for expert information and issues that the public lists as the most important problem facing the country (Table 1). With no agenda controls, there is a positive and significant relationship between change in issue attention from the CRS and change in issue salience as reported in public MIP responses (Model 1,  $p = 0.001$ ). When issues become more salient and the public identifies them as the most important problem for policymakers to solve, members of Congress respond by demanding more information on policy topic  $i$  at time  $t$ . This is also a significant long-term relationship between change in issue salience at time  $t$  and demand for expert information at time  $t-1$ , but no significant relationship when fixed effects are included in the model (see Table A2 in the appendix), suggesting that it is driven by structural similarities in the issues that the CRS produces reports on and the issues that the public finds most important. These results strongly suggest that members seek out expert information in response to short-term changes in issue salience.

TABLE 1  
Panel Estimation of Change in CRS Report Policy Attention (t)

Independent Variables	Model 1	Model 2	Model 3	Model 4
CRS Reports <sub>t-1</sub>	-0.25*** (0.03)	-0.38*** (0.04)	-0.38*** (0.04)	-0.51*** (0.04)
Δ Percent of MIP <sub>t</sub>	0.14** (0.04)		0.11* (0.04)	0.12** (0.04)
Percent of MIP <sub>t-1</sub>	0.04* (0.02)		0.01 (0.02)	-0.02 (0.01)
Δ Percent of NYT Stories <sub>t</sub>		0.16*** (0.03)	0.15*** (0.03)	0.10** (0.03)
Percent of NYT Stories <sub>t-1</sub>	0.21***	0.20*** (0.03)	0.09* (0.03)	(0.04)
Δ Percent of Hearings <sub>t</sub>				0.11 (0.10)
Percent of Hearings <sub>t-1</sub>				0.23*** (0.06)
Δ Percent of Roll Calls <sub>t</sub>				0.09+ (0.05)
Percent of Roll Calls <sub>t-1</sub>				0.09* (0.04)
<i>N</i>	400	380	380	380
<i>r</i> <sup>2</sup>	0.13	0.14	0.24	0.31

Notes: Random effects. + $p < .10$  \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ . Standard errors in parentheses. Models 2–4 are limited to 380 observations because New York Times Index data is not available for 2017. Models using fixed effects and panel-corrected standard errors are presented in Appendix Table A1 and A2. Percentages are expressed in proportions.

We see similar results when media coverage is substituted for MIP to measure issue salience. We find a consistent short-term relationship between demand for expert information and media coverage. With no agenda controls, there is a positive and significant relationship between short-term change in issue attention in CRS reports and change in issue attention in *New York Times* articles ( $p = < .001$ ). When issues receive more media attention, members of Congress respond by demanding more information on the issue. As with MIP, we find a positive and significant long-term relationship ( $p < .001$ ), but the relationship appears driven by issue fixed effects (see Table A2 in the appendix).

Next, the results are similar if both MIP and media attention are included in the same model and also when we add in additional controls for the legislative agenda. With no agenda controls, short-term change is positive and significant for both MIP (Model

3,  $p = 0.014$ ) and media attention ( $p < .001$ ). When agenda controls are added in, the relationship remains positive and significant ( $p = 0.005$  for MIP and  $p = 0.002$  for media attention). There are positive and significant relationships between the percentage of roll-call votes on an issue and the percentage of CRS reports, both in the short-term ( $p = 0.07$ ) and the long-term ( $p = 0.01$ ). However, no such short-term relationship exists for congressional hearings ( $p = 0.31$ ). Most modern hearings are devoted to overseeing the bureaucracy, highlighting issues, or public grandstanding rather than considering new laws (Jones, Theriault, and Whyman 2019; Lewallen 2020; Lewallen, Theriault, and Jones 2016). Members do not appear to request more expert information from the CRS as issues receive attention in Congressional hearings.

Overall, these results suggest a dynamic and highly responsive relationship between congressional demand for expert information and issue salience. When issue salience or media attention increases, we see a short-term increase in attention to policy in CRS reports. Because the process that generates CRS reports is driven by requests or anticipated requests by members of Congress, these results suggest that congressional demand for expert information follows a similar pattern.

## Conclusions

Consultation between elected policymakers and experts is important to functional policymaking in a democracy. Members of Congress have a variety of incentives to request expert information ranging from responding to constituents, to conducting oversight, or even just their personal desire to produce good public policy. These incentives are all united by an underlying goal of resolving pressing policy problems. Problem-solving models of policymaking, where elected legislators focus their limited attention on solving the most important problems facing their constituents, provide an important mechanism for representation in a democracy (Bevan and Jennings 2014; Jones, Larsen-Price, and Wilkerson 2009). In order for elected officials to solve salient problems, they must search for subject-matter experts to define problems and develop effective solutions (Baumgartner and Jones 2015; Workman, Jones, and Jochim 2009).

We find strong evidence that members of the US Congress consult experts when issues become salient. As public concern on a policy topic increases, the Congressional Research Service

produces more reports on that topic. CRS produces reports in response to or in anticipation of requests from members of Congress. Because these reports were private until recently, we can infer congressional demand for expert information by observing new CRS reports. Thus, we conclude that members of Congress respond to increased public concern over issues by searching for policy analysis from nonpartisan experts.

Importantly, our research design also does not reveal whether information provided by experts ultimately informed policy outputs by Congress. Our results suggest that members of Congress search for expert information on the same or similar issues that the public identifies as the most important problems facing the country. Because these searches were not visible to the public, we argue that policymakers at least considered the advice of experts in making their decisions. Future research should explore under what conditions elected officials are more likely to follow the recommendations of expert policy analysts.

Future research should also more closely examine congressional demand for expert information at a more granular resolution. Our research design allows us to observe broad shifts in demand for expert policy information from the CRS year to year. It does not allow us to examine shorter-term shifts in demand or shifts between individual issues inside a major topic area. For example, on health-care policy members could shift their attention from prescription drug pricing to opioid abuse in response to increased issue salience. Because both issues fall under the broad umbrella of health care, our data would detect no shift in either CRS or public concern. Research suggests that legislators may respond more quickly to problems than our year-to-year data suggest (Bevan, Jennings, and Pickup 2019). Researchers should explore a qualitative research design using process-tracing methods, with careful case selection, to examine demand for expert information on individual issues.

We introduced a new dataset on the policy content of all reports by the Congressional Research Service from 1997 to 2017. We believe that this article is only the first of many that can use these data to understand information processing in the US Congress and legislatures more generally. Analytical bureaucracies are an important, and relatively understudied, aspect of the policy process. The Congressional Research Service has been a core feature of how Congress functions since the 1970s, but it is merely the most



recent incarnation of Congress' subunits charged with responding to congressional requests for information (Brudnick 2008). This article represents an important first step in characterizing the utilization of internal analytical bureaucracies in the US Congress. Future research could examine under what conditions members of Congress rely on the analytical bureaucracies for information and when they rely on alternative or more partisan information sources such as partisan think tanks, intraparty factions, or party-aligned interest groups.

### *Data Availability Statement*

Data and replication materials available on Harvard's Dataverse at <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/PAWMSP>

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## NOTES

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1. The Policy Agendas Project is the US chapter of the Comparative Agendas Project.

2. Note that both members and staffers may make requests of the Congressional Research Service. We do not believe this fact threatens our core inference because our main argument is broadly that increased issue salience is detected by members of Congress and leads to increased requests to CRS. As Salisbury and Shepsle argue, staffers' "explicit responsibility is to serve the member's needs and interests, and [their] primary normative commitment is loyalty to the member" (1981, 560). Therefore, even if a staffer were to make a request, it would likely still be in response to increased salience, and it would not be made without the knowledge, or implicit approval, of their boss.

3. In fact, former CRS analyst Kevin Kosar has discussed fielding exactly these types of requests from members to help them respond to constituent

concerns. See <https://washingtonmonthly.com/magazine/janfeb-2015/why-i-quit-the-congressional-research-service/>

4. Consolidated Appropriations Act (2018).

5. They agreed on the subtopic code in 63% of observations.

6. These data are available online at [www.comparativeagendas.net/us](http://www.comparativeagendas.net/us)

7. In the appendix, we further explore the differences between attention to policy in new reports and revisions. Appendix Figure A1 shows the total number of new reports and revisions over time. Appendix Figure A2 shows the distribution of policy in new and revised reports combined.

8. Notes: “Frequently Asked Questions About Prescription Drug Pricing and Policy.” Congressional Research Service. May 2, 2017. Available online at <https://www.everycrsreport.com/reports/R44832.html>

9. The results do not change when macroeconomics policy is excluded.

10. The *New York Times Index* data are not available for 2017.

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## Problem Solving and the Demand for Expert Information in Congress 19

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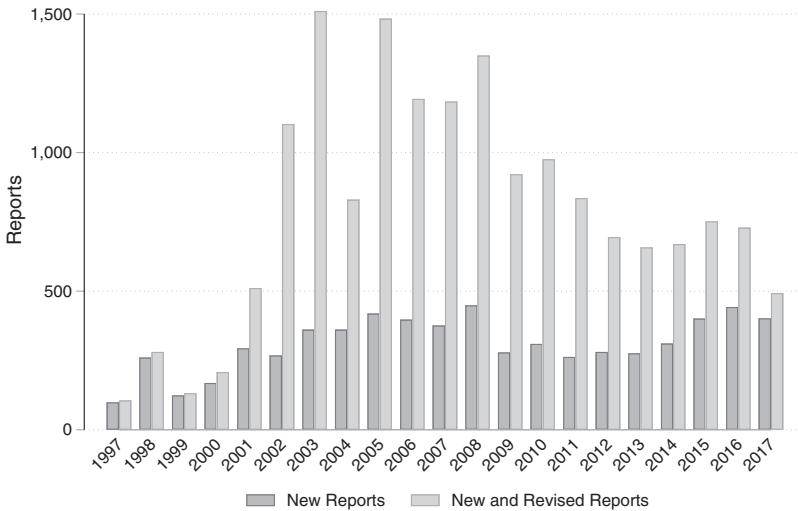
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### Appendix A

#### *CRS Report Revisions*

The revision of existing CRS reports is not uncommon, but it is also not equally common across policy areas. We collected each individual revision; 78% of reports had no revisions, and 95% of reports had five or fewer revisions. Just .1% of reports were revised more than 40 times. Figure A1 shows the total number of new reports and revised reports in each year. Considerable differences in the shape of their distribution exist, as compared to only the new reports, with relatively more new reports appearing in the beginning and end of the time period. Figure A2 shows the cross-sectional distribution of attention across issues. We see that these movements are closely correlated in most issue areas ( $\rho = 0.98$ ), with foreign affairs standing as a notable exception. Because we have no a priori reason to believe that new unique reports or report revisions is a better measure of Congressional demand for information, but we have no means of identifying the extent that a report was revised, we only present models using unique reports in our analysis.

**FIGURE A1**  
Total New and Revised CRS Reports by Policy Area, 1997–2017



*Note:* Figure 3 shows the total number of new and revised CRS reports coded into each major policy topic by two trained research assistants using the Policy Agendas Project codebook.

FIGURE A2  
Frequency of New and Revised CRS Reports, 1997–2017

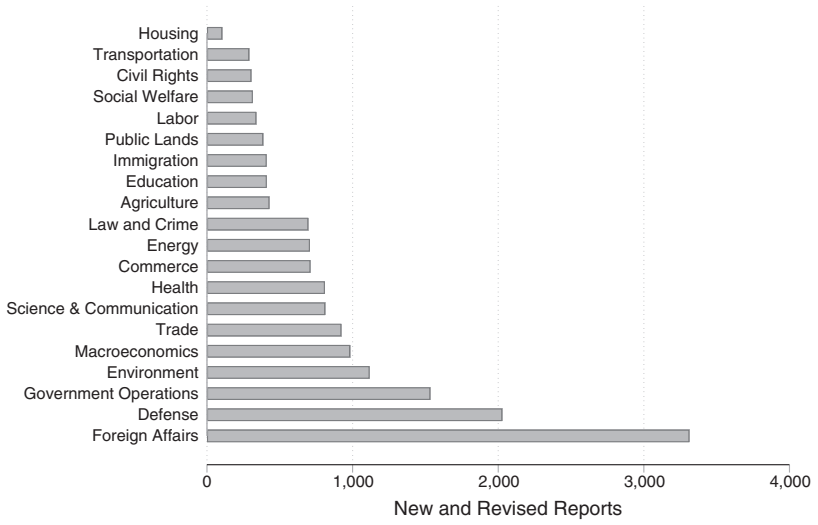


TABLE A1  
Panel Estimation of CRS Report Policy Attention, Panel  
Corrected Standard Errors (t)

Independent Variables	Model 1	Model 2	Model 3	Model 4
CRS Reports <sub>t-1</sub>	-0.25*** (0.06)	-0.38*** (0.07)	-0.38*** (0.07)	-0.51*** (0.08)
Δ Issue Salienc <sub>t</sub>	0.14** (0.05)	0.16*** (0.04)	0.11* (0.05)	0.12* (0.05)
Issue Salienc <sub>t-1</sub>	0.04* (0.02)	0.21*** (0.04)	0.01 (0.02)	0.02 (0.02)
Δ Percent of NYT Stories <sub>t</sub>			0.15** (0.04)	0.10* (0.04)
Percent of NYT Stories <sub>t-1</sub>		0.20***	0.09* (0.04)	(0.04)
Δ Percent of Hearings <sub>t</sub>				0.11 (0.15)
Percent of Hearings <sub>t-1</sub>				0.23** (0.08)
Δ Percent of Roll Calls <sub>t</sub>				0.10 (0.09)
Percent of Roll Calls <sub>t-1</sub>				0.09 (0.07)
<i>N</i>	400	380	380	380
<i>r</i> <sup>2</sup>	0.15	0.23	0.24	0.32

*Note.* Panel corrected standard errors in parentheses. +  $p < .10$  \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$ . All models contain major topic fixed effects. Standard errors in parentheses. \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$ . Models 2–4 are limited to 380 observations because *New York Times Index* data is not available for 2017.



TABLE A2  
 Panel Estimation of Change in CRS Report Policy Attention (t),  
 Fixed Effects

Independent Variables	Model 1	Model 2	Model 3	Model 4
CRS Reports <sub>t-1</sub>	-0.91*** (0.05)	-0.92*** (0.05)	-0.92*** (0.05)	-0.93*** (0.05)
Δ Issue Salience <sub>t</sub>	0.09* (0.04)		0.08* (0.04)	0.08+ (0.04)
Issue Salience <sub>t-1</sub>	0.02 (0.02)		0.01 (0.03)	-0.0001 (0.03)
Δ Percent of NYT Stories <sub>t</sub>		0.07* (0.03)	0.06+ (0.03)	0.06+ (0.04)
Percent of NYT Stories <sub>t-1</sub>	0.07	0.05 (0.04)	0.04 (0.05)	(0.05)
Δ Percent of Hearings <sub>t</sub>				-0.05 (0.10)
Percent of Hearings <sub>t-1</sub>				-0.05 (0.09)
Δ Percent of Roll Calls <sub>t</sub>				0.14* (0.05)
Percent of Roll Calls <sub>t-1</sub>				0.22** (0.08)
<i>N</i>	400	380	380	380
<i>r</i> <sup>2</sup>	0.13	0.14	0.15	0.19

Note. Standard errors in parentheses. +  $p < .10$  \*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$ . All models contain major-topic fixed effects. Models 2–4 are limited to 380 observations because *New York Times Index* data is not available for 2017.