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# Laws and Roll Calls in the U.S. Congress, 1891–1994

Recent empirical studies of lawmaking activity by legislatures rely heavily on roll call based measures and assume that roll call activity reflects lawmaking activity. We question this assumption for the case of the U.S. Congress. We examine several plausible sources of dissonance between the set of enacted public statutes and the universe of recorded votes in the U.S. Congress, using a comprehensive dataset of public enactments and roll call activity between 1891 and 1994. Because only 11.9% of the bills signed into law receive a recorded vote in the House, only 7.9% receive a recorded vote in the Senate, and only 5.5% receive a recorded vote in both the House and Senate, we provide guidance as to when studying *voting* behavior is likely a reasonable proxy for *lawmaking* behavior. There are sometimes important differences between the laws that do and do not receive a roll call that researchers should account for when using roll calls to study lawmaking in the U.S. Congress.

Unlike the study of public opinion, whose objects of interest can often be directly assessed, legislative politics research is typically interested in more elusive concepts. Partisanship, party pressure, policy preferences, legislative productivity, and policy change present severe measurement difficulties, regardless of the particular legislature of interest. Scholars are often forced to rely on observable behaviors that they hope are related to the concept of true interest. The analysis of roll calls occupies a prominent place in the study of legislative politics, in part, because of these measurement difficulties: roll calls are a byproduct of the legislative process and readily available for analysis.

Over the last 20 years, roll call votes have been used to measure legislative outputs and characterize the political environment by scholars interested in the U.S. Congress and other legislatures, including the Italian Chamber of Deputies (Cox, Heller, and McCubbins 2008), the Chilean Senate (Londregan 2000), and various European Parliaments (Doring 2001; Rasch 2000; Tsebelis 1994). Such ubiquitous usage suggests that roll call voting behavior (the public recording of

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individual positions on an issue) and lawmaking behavior (the act of authorizing new laws) are closely connected. The relationship between the two behaviors, however, is not well understood. Some scholars have raised cautionary flags about relying too heavily on roll call votes when studying lawmaking in Congress (see, for example, Arnold 1990, Hall 1996, Shepsle and Weingast 1994) or other legislatures (see, for example, Carrubba et al. 2006), but the relationship has never been systematically assessed over any length of time in the United States.<sup>1</sup>

Investigating the relationship between laws and roll calls is important not only because of what that relationship may reveal about the act of voting itself, but also because of the possible implications for studying legislative politics. Without examining the process whereby only some laws are selected to receive a recorded vote, we are unsure if explanations of *voting behavior* (for example, coalition sizes, roll rates, and likeness and cohesion scores) contribute to an understanding of *lawmaking*, or if roll calls may be more appropriate for some investigations than others. For example, if members keep logrolls on bills dealing with particularistic goods off the record, then analyses based only on roll calls will provide a partial and potentially misleading portrait of congressional activity, even if distributive theories perfectly explain such congressional behavior.

Moreover, examining the behavior of the U.S. Congress in a fashion similar to that used to assess the prevalence of roll calls in the other legislatures (see, for example, Carrubba et al.'s 2006 study of roll calls in the European Parliament and Swiss lower house) may highlight common problems in the study of legislative activity. Hug (2006) has collected the incidence of roll call voting in 92 countries and finds that the national legislatures of only 20 countries record every vote (included in the set of 20 are the U.S. House and Senate). Similarly, Carrubba et al. (2006) claim that "the contemporary U.S. Congress differs from many other legislatures in that almost all legislative votes are by roll call" (691). In this article, we show that the U.S. Congress is not as exceptional as it may initially appear in this respect, and we highlight the potential for common solutions.

We explain the extent to which the set of recorded votes reflects lawmaking activity in the U.S. Congress over a 104-year period, from just after the initial enactment of Reed's rules in 1890 to 1994 (51st– 103d Congresses). Using several new data sources, we characterize the dissonances between laws and roll calls, we consider some plausible incentives for recording and not recording a vote, and we discuss how the political context, policy content, and institutional arrangements affect the probability of recording a vote. The differences we uncover

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between the sets of laws that do and do not receive recorded votes suggest that legislators use roll calls to position themselves for upcoming elections, when credit claiming is difficult. Identifying the circumstances under which roll calls are more likely helps to establish guidelines for the use of roll calls in studies of lawmaking and highlights aspects of the relationship that require closer attention when roll call measures are used to characterize the political environment.

# 1. The Effect of a Selective Relationship between Laws and Roll Calls

The study of congressional lawmaking has a long and important history in political science. Because empirical investigations into congressional lawmaking typically utilize roll call measures such as interest group scores, ideal point estimates, roll rates, coalition sizes, or voting behavior on selected votes, contributions and controversies in the study of the U.S. Congress are often closely connected to the analysis and interpretation of roll calls.<sup>2</sup> Roll call measures are prominently used to investigate the role of political parties (see, for example, Cox and McCubbins 1993, 2005; Krehbiel 1998; Krehbiel, Meirowitz, and Woon 2005; and Rohde 1991), legislative and executive relations (Epstein and O'Halloran 1999; McCarty and Poole 1995), the origins and design of legislative rules and institutions (Binder 1997; Schickler 2000; Wawro and Schickler 2004), the role of congressional committees (Cox and McCubbins 1993; Krehbiel 1991), the effects of elite polarization on policymaking (Jones 2001; McCarty, Poole, and Rosenthal 2006), the existence of realigning elections (Brady 1988), and the role of sectionalism in American political development (Bensel 1984) to name a few.

Despite the use of roll calls in the study of legislative politics, some scholars question how informative roll calls are for studying lawmaking in the U.S. Congress. For example, Fenno (1966) notes that only 36 roll calls were recorded on the 547 proposed amendments to appropriations bills in the House between 1947 and 1962. Arnold (1990, 269) describes the quality of roll calls related to economic, tax, and energy policy by noting, "I am struck by how inconsequential many of these decisions really are." Rohde (1991) mentions that roll call votes may not reflect policy outcome preferences, and Hall (1996, 2) argues, "floor voting is only one and probably not the most important form of participation in the legislative process." Finally, from his examination of coal and atomic-energy policy in the House from 1947 to 1976, VanDoren (1990, 1991) concludes, "the main problem with

roll-call studies [is]... the non-random nature of roll calls themselves. Roll-call votes occur only if policy proposals receive committee approval and do not languish on the calendar and enough members desire a roll-call vote" (VanDoren 1990, 332).

These works raise cautionary flags, but no work fully investigates how the set of roll calls relate to the set of enacted public statutes. Characterizing the relationship between roll calls and legislative enactments is critically important because of the extent to which roll calls are used either as proxies for lawmaking behavior or to measure lawmakers' preferences. There are two general problems with using roll calls to study congressional lawmaking.

First, explaining roll call activity may not be equivalent to explaining lawmaking activity. If the incentives for recording a vote differ from the incentives for enacting a statute, then explaining voting behavior may prove inadequate for explaining lawmaking behavior. Without examining the relationship between the statutes that do and do not receive a recorded vote, one cannot assess whether explanations of congressional lawmaking based wholly on recorded votes are relevant for understanding the vast amount of lawmaking that is enacted without a single recorded vote.

Our investigation is important because many prominent works focus on explaining voting behavior. For example, on the basis of roll calls alone, Poole and Rosenthal (1997) claim:

As a result of the "tyranny of the majority," slight changes in mean position [of NOMINATE] when accompanied by a shift in majority control, can lead to *substantial changes in* policy. . . . We find that the *swings in policy* during the nineteenth and the early twentieth century were much greater than those later in the twentieth century. Although the New Deal initiated a large *policy shift* comparable to those of the nineteenth century, since the end of World War II, *policy swings* have dampened considerably. (58; emphasis added)

Poole and Rosenthal assume that explaining variation in voting behavior is equivalent to explaining variation in policy outcomes. More recently, Cox and McCubbins (2005) argue that "in order to test our main points—that the Reed rules permanently and significantly changed voting behavior and *policy outcomes* in the House . . . we employ a dataset of House final passage votes" (51; emphasis added). Roll calls are certainly relevant for characterizing policy outcomes for the statutes that receive a roll call, but it is also important to investigate the omissions that result from focusing only on roll calls.

Several conclusions are possible.<sup>3</sup> The prevalence of roll calls may simply reflect the workload of Congress; roll calls may be

randomly requested and they may therefore be a random sample of lawmaking activity. If so, a roll call based focus is unproblematic. Alternatively, roll calls may be a selective record of lawmaking activity but a selective record that is useful for studying lawmaking involving the aspects that affect the likelihood of a recorded vote. If roll calls are more likely on some issues or in some time periods, then we can determine when roll calls are informative for studying lawmaking.

Examining the relationship between laws and roll calls also highlights how focusing on roll calls may mischaracterize the amount of political disagreement in the legislature. Suppose that unrecorded votes reflect unanimous, or close to unanimous, agreement. (Note that the data we possess are largely silent on this matter; we offer the example as an illustrative example only.) If so, the lack of roll calls on these bills will not affect ideal point estimates because unanimous and nearunanimous votes provide almost no information for differentiating legislators with roll call scaling methods such as NOMINATE (Poole and Rosenthal 1997) or a Bayesian quadratic model (Clinton, Jackman, and Rivers 2004).

The notion that unrecorded votes may be largely uninformative for scaling algorithms does not necessarily justify ignoring the lawmaking activity that does not receive a recorded vote. Consider the case in which Congress considers a single bill and that bill receives a roll call that perfectly splits the parties. Characterizing congressional activity using this single vote would suggest a highly polarized Congress: policy preferences are divided along party lines and the issue that came before the Congress was resolved in a partisan fashion. Compare this circumstance to one in which, in addition to approving the single bill by a straight party-line vote, Congress unanimously approves one thousand other bills via voice votes. Analyzing the roll call record for these two circumstances would produce identical ideal points, because the only information useful for recovering ideal points is contained in the single party-line vote. Nonetheless, it seems problematic to conclude that the lawmaking environments of these two examples are identical. Even though the one thousand unanimous bills contain no useful information for distinguishing *between* legislators, and even though the set of estimated ideal points from the two circumstances would be identical, it seems unlikely that we should conclude that the political environment in which a Congress unanimously passes one thousand bills and passes one vote by a party-line vote is equivalent to the environment in which a single bill passes by a party-line vote. This equivalency, however, is exactly what we would conclude on the basis of roll calls alone.

The extent to which the discrepancy between laws and roll calls is problematic depends on what scholars are interested in measuring, which is sometimes unclear. For example, in one of the most expansive investigations of elite polarization, McCarty, Poole, and Rosenthal (2006) write that "polarization is, for short, a separation of politics into liberal and conservative camps" (3). It is unclear whether *politics* here refers to the policy preferences of the legislators or also to the type of legislation being considered and the extent to which the legislation creates political controversy. Ignoring statutes passed without a recorded vote is certainly consequential for the latter conceptualization, because so doing overstates the level of political conflict if roll calls are a consequence of dissent within the legislature. Krehbiel (2008) raises a similar point when discussing whether the increased polarization of recent Congresses might be an artifact of the increased number of unanimous votes.

# 2. Reasons for Concern: Incentives for Voting and Legislating

Only by assessing the relationship between laws and roll calls can one prescribe the proper use of roll calls for understanding *lawmaking* rather than *voting* behavior. Recording a vote and enacting a law are quite different activities. Lawmaking is a collective enterprise requiring the assent of multiple actors, and much of the work is done out of the public's view. Lawmaking actions also likely yield low electoral payoffs relative to the opportunity costs involved; consider the electoral returns for engaging in committee markup versus the returns for visiting the district. Moreover, because successful legislation requires the approval of the other chamber and the president, there is also uncertainty about whether or not any effort will be policy consequential and, if so, if members' claims about their role in the process are credible.

Roll calls, in contrast, provide an immediate and individual record of a member's positions, they are often publicized by local newspapers, and they can help or hurt a member at election time (Arnold 1990, 2004; Kingdon 1989). Voters require nuanced and complicated explanations to describe lawmaking activity, but explanations and interpretations of roll calls are relatively simple, depending on the nature of the proposal being considered.

Passing a public statute in the United States also requires the approval of many more individuals than must approve a motion to record a vote. In the House of Representatives, there are several voting

options available [see Roberts and Smith (2003) on the voting procedures available in the Committee of the Whole]. Issues decided by voice votes are determined by the relative volume of "ave" and "nav" responses and do not provide an individual position. Votes by division result if the Speaker is uncertain about the outcome of a voice vote or if a member demands a vote by division. In either case, members supporting and opposing the motion stand in turn to be counted, and only the vote totals are recorded. Yea-and-nav votes, which do record individual positions, arise if one-fifth of members present in the chamber demand a vote, if the vote involves a veto override or certain specified types of legislation, or if any member objects that a quorum is not present. A recorded vote also occurs if one-fifth of a quorum (specifically, 44 members in the contemporary House) supports a request. The U.S. Senate also has voice votes, votes by division, and yea-and-nay votes. The number of senators needed to request a recorded vote is one-fifth of the senators present (that is, a minimum of 11, as per the Constitution's definition of a quorum). Note that it is possible for a single member of the House to force a recorded vote by objecting to the lack of quorum on a sparsely populated House floor. This possibility raises the question of whether or not the discrepancy in the relative difficulty of passing laws and recording roll calls results in a selective recording of individual positions.

There are several reasons why the record of roll calls might selectively reflect congressional lawmaking activity. Rather than testing a particular theory about when members might want to take individual positions (see, for example, Gabel, Carrubba, and Hug 2008; Krehbiel and Woon 2005; and Snyder and Ting 2002, 2003), we concentrate on the first-order task of documenting the empirical regularity and examining some general expectations about the incentives for recording individual positions.<sup>4</sup>

Examining the relationship between laws and roll calls requires that we ask when members have an incentive to take an individual position or force others to take a position on an issue. One possible answer is that members seek an individual record when the underlying issue attracts prominent attention. If credit claiming on highly salient issues is difficult, a second-best alternative may be to compile a verifiable record of support or opposition on such issues (Mayhew 1974). As Kingdon (1989) argued in his classic treatise, the media help to identify and define the set of important issues. Because the media also prominently report on members' voting behavior (Arnold 2004), roll calls should be more likely on the issues that journalists and congressional chroniclers identify as especially noteworthy. A second possibility is that, ceterus paribus, the incentive to record a vote depends on the political control of the branches of government. Shipan (2006) has highlighted this possibility, arguing that divided government creates incentives to put issues on the agenda. In that case, roll calls may occur more frequently in periods of divided government, because then there is increased incentive to use recorded votes to stake out positions and force opponents to record positions on difficult proposals. This incentive is presumably larger in the House, which does not face the staggered electoral cycles of the Senate.

For similar reasons, the political composition of the legislature might also affect the incentives for recording a vote. In particular, the more lopsided the control of the legislature is, the weaker the incentives are for recording individual positions. Not only is the attribution of activity by party relatively clear, but minority party members also have a smaller chance of significantly improving their stature in the following Congress. In contrast, parties and members may use almost every issue for electoral gain when the margin between the two parties is small. When both parties have the opportunity to become the majority in the next Congress, we may therefore expect more roll calls because of the increased benefits of posturing and position taking.

We might also expect several temporal relationships. Most obviously, following the advent of electronic voting in the House in 1973, which greatly decreased the costs associated with recording individual positions, the prevalence of roll calls should have increased. The number of roll calls should also increase over time as the media environment expands, the number of involved interest groups increase, and politicians become more career oriented. All three trends contribute to the increased importance of individual positions for legislators interested in highlighting their positions and contributions in an attempt to secure reelection or higher office.

If the recording of votes is partially motivated by electoral considerations, then positioning should be most likely immediately prior to the election, to maximize the salience of the vote to the electorate. Prior to the reforms of the congressional calendar taking effect in the 73d Congress (1933–34), the long-short congressional sessions meant that only activity in the long session was plausibly relevant for legislators' reelection bids. Following the 73d Congress, however, the second session has presumably been the session in which, all else being equal, there have been greater incentives for recording an individual position. Given the Senate's staggered electoral cycles, we might expect a larger effect in the House.

Exogenous shocks to the political system, such as wars, may also change the incentives for recording individual positions (Mayhew

2005). If members are evaluated according to their collective ability to address crises rather than on the positions they take, then fewer roll calls should appear in times of crises. This expectation is admittedly soft; we might alternately expect increased position taking, because crises divert attention from the political scene and members may take more positions to compensate for the decreased attention.

Finally, some issues may be more salient to the public than others. Legislators may try to anticipate the issues that will be of interest to their constituents in the upcoming election and take positions on these issues. Statutes dealing with domestic politics, for example, may be more electorally relevant than statutes dealing with the District of Columbia or quasi-private public bills dealing with local issues on which credit claiming is possible. Beyond some general considerations as to why some issues may be more salient to constituents than others because the issues involve either larger stakes or more-frequent (nontrivial) adjustments—identifying how policy-issue differences might affect the incentives for recording a roll is tricky, but progress is feasible in at least one policy domain.

### 2.1 The Importance of Issues: The Provision of Particularistic Goods

Public goods (nondivisible goods, such as national defense) and particularistic goods (whose benefits accrue to a limited set of constituents) provide very different incentives for individual positiontaking. Credit claiming is difficult for public goods, because members cannot claim responsibility for such enactments unless the members are directly and publicly associated with the bill. As a potential partial remedy, roll calls provide verifiable evidence of support or opposition. In contrast, the localized distribution of private goods ensures the credibility of credit claiming.

Evidence of support may not always be desirable, however, and members may sometimes seek to keep their actions unknown to constituents and potential challengers. The amount of leeway that members have for explaining their votes is a controversial matter (cf. Bianco 1994; Denzau, Riker, and Shepsle 1985; Fenno 1978; Wilkerson 1990; and a model by Austen-Smith 1992 that nests conflicting accounts), but it is certainly plausible that members prefer to minimize their electoral risk. As Kingdon notes, "the infrequency of votes on which congressmen are recorded aye or nay was another feature of the parliamentary situation used to get off the hook" (1989, 52). In his discussion of the 97th House's (1981–82) attempt to provide members with a tax deduction, Hibbing (1983) remarks, "to an amazing extent, all this legislative activity occurred without recorded roll-call votes" (222). Legislators may sometimes desire an environment in which votes are not recorded. Because the number of members who can force a roll call in the House is so small, the relevant question becomes, when would almost every member have an incentive to keep a vote off the record?

The provision of particularistic goods—goods whose costs are borne by all and whose benefits are concentrated among a few—seems unlikely unless the project can be bundled into an omnibus bill containing other particularistic goods or unless a sequence of logrolls on individual bills can be sustained (Evans 2004; Shepsle and Weingast 1981). In fact, to explain the universalism of particularistic-good provision (see, for example, Ferejohn 1974 and Wilson 1986), scholars appeal to uncertainty about membership in the winning coalition (for instance, Weingast 1979). Explanations citing the uncertainty of belonging to the winning coalition seem odd in light of claims about the role of political parties in coordinating expectations and resolving uncertainty (see Aldrich 1995).

It is not implausible that the process of enacting legislation may be partially responsible for universalism. The well-documented "norms" of universalism and reciprocity may result from the ability of a small group of members to force a roll call and presumably unravel the logroll if they are denied particularistic goods. If there is a risk that the necessary vote trades required to enact particularistic-goods legislation may evaporate under public scrutiny, then members may enact such legislation using voice votes and thereby shield every member from the task of explaining her or his vote. Public statutes primarily concerned with the provision of particularistic goods should thus receive fewer roll calls than statutes addressing other issues. Not only would it be time-consuming to vote on every statute providing particularistic goods beforehand, but members would also presumably prefer to keep their support for private goods quiet.

The provision of particularistic goods is but one issue, but it is suggestive of the more-general need to consider the different incentives for voting and legislating to determine if aspects of the former are necessarily relevant for understanding the latter.

### 3. The Empirical Relationship in Aggregate

To examine the relationship between lawmaking and roll calls, we identified every public statute enacted from the post-Reed rules 51st Congress (seated in 1891) to the 103d Congress (ending in 1994) and every vote recorded by the House and Senate to determine which enactments received at least one roll call in the House, at least one roll call in the Senate, at least one roll call in both the House and the Senate, and no roll call of any kind. We also used existing data to identify the significance and policy content of every public statute.

Given these data, our conclusions speak only to the relationship between enacted laws and roll calls (that is, the probability of observing a roll call on a bill, conditional on that bill being enacted into law).<sup>5</sup> We focused on enacted statutes rather than bills because the data necessary to study policy proposals are unavailable for most of the period. [Adler and Wilkerson (2007) collected a massive amount of data on bill introduction for the post-World War II period, but the variables of interest for this study are unavailable and infeasible to collect for the period we wished to examine.] Moreover, because we are interested in the relationship between lawmaking and the decision to record a roll call, it is difficult, if not impossible, to determine if a bill is a serious attempt at policy change or mere position taking.

Ideally there would be a complete record of every decision made for every proposal that Congress considered. Second-best would be a systematic relationship between laws and roll calls such that roll call behavior reflected lawmaking activity (for example, a random sample of activity) and the prevalence of roll calls was entirely due to congressional workload—the more statutes a Congress enacted, the more roll calls it would record in the process of enacting these statutes. (Of course, legislatively active Congresses may produce few roll calls if there is a full and uncontested policy agenda.)

Figure 1 plots the relationship between laws and recorded votes between 1891 (51st Congress) and 1994 (103d Congress).<sup>6</sup> For the purposes of our investigation, we searched the Inter-university Consortium for Political and Social Research (ICPSR) codebooks for votes whose descriptions included the keywords *to pass, to adopt,* and *passage* to identify votes on conference reports and chamber resolutions.<sup>7</sup> Our interpretation of *final passage* is quite generous and includes votes that are not actually the last vote on a proposal (for example, votes on unsuccessful motions to suspend the rules and pass). Our expansive definition makes the paucity of final passage roll calls even more surprising.

The top panel of Figure 1 readily supports two conclusions. First, most public statutes fail to receive a roll call of any kind. For example, despite enacting a record 1,009 public statutes, the Republican-controlled 71st House (1929–1931) recorded only 103 roll calls (36 of which count as final passage votes under our generous definition).







B: Top 3500 Statutes



*Note:* The thick, solid line denotes number of public statutes enacted; the thin, solid line graphs the number of statutes receiving a recorded vote in both chambers; and the thin, dashed line is the number receiving a recorded final passage vote in both chambers.

Moreover, only 14 of the 1,009 enacted statutes received a recorded final passage vote in the House, and only 15 received such a vote in the Senate.

Second, there is no systematic relationship between how many proposals are enacted into law and the number of enactments that receive a recorded vote. The correlation between the number of laws and the number of laws receiving at least one roll call is only -.007 (-.008 if we only count final passage votes). Contrary to a congressional workload explanation for the prevalence of roll calls, there is no evidence of either an increasing relationship (as would be the case if more enactments produced more roll calls) or a decreasing relationship (if members who were pressed for time because of a robust agenda decided to dispense with position taking for the sake of securing policy outcomes).

The bottom panel of Figure 1 examines only the most notable enactments to determine if the discrepancy is due to the inclusion of inconsequential statutes. Concentrating on important enactments has a long history in political science (Chamberlain 1946; Mayhew 1991), and some scholars argue that lawmaking accounts are largely concerned with nontrivial legislation (see, for example, Baumgartner and Jones 2005, Cameron 2000, and Krehbiel 1998). Using Clinton and Lapinski's (2006) measure of legislative significance, which essentially replicates Mayhew's (1991) methodology of measuring the relative noteworthiness of each public statute according to congressional chroniclers and observers over the entire period, we examine the relationship between roll calls and laws ranked among the top 3,500 notable statutes enacted between 1877 and 1994.<sup>8</sup> Focusing on this set of laws is equivalent to focusing on the 10% most significant enactments of the period.

The bottom graph in Figure 1 reveals a clearer relationship between the number of top 3,500 laws and the number of such laws receiving a roll call of any kind in both the House and Senate (correlation .865) and a recorded final passage vote in both chambers (correlation .817). These high correlations provide only weak evidence of the representativeness of the roll call record. Nearly 46% (1,600) of the top 3,500 enactments lack a roll call of any kind in the House. Even among the top 500 most notable enactments—a list equivalent to Mayhew's (1991) list of landmark legislation—nearly 24% (118) lack a roll call of any kind in the House. For example, the 73d Congress (1933–35) passed many of the most important statutes ever enacted, but it recorded only 143 votes.

To demonstrate that this pattern is not due to the stringent requirement that the statute receive a recorded vote in both chambers,







B: Top 500 Statutes



*Note:* "Enacted Statutes" refers to the total number of public statutes enacted in each Congress. "(House or Senate) Final Passage" refers to the number of statutes receiving a recorded final passage vote in the House or Senate. "Any (Senate or House) Vote" indicates the number of statutes receiving a recorded vote of any kind in the Senate or House.

in Figure 2 we plot the number of top 3,500 statutes and top 500 statutes enacted in each Congress (thick, bold line), and the number of such statutes receiving a recorded vote in the House, a recorded final passage vote in the House, a recorded final passage vote in the Senate.

Among the top 500 statutes, there are almost no discrepancies. A majority of enacted statutes receive a roll call in both the House and the Senate. An optimistic reading is that, so long as scholars are content to characterize lawmaking activity on only the most notable enacted statutes (and, by extension, presumably, the most notable statutes that fail to become law), the roll call record contains some information for the task. Of course, determining whether or not the votes that are recorded reflect the issues involved in the lawmaking process is beyond the scope of our investigation; all we can say with certainty is that at least some member-level information exists for these statutes.

The relationship between enactments and roll calls is murkier for the top 3,500 statutes. Many statutes fail to receive a roll call regardless of whether we consider laws receiving a roll call in both chambers or in either chamber. It is true, however, that the House is almost always more likely than the Senate to record a vote.

The absence of a roll call is not obviously attributable to overwhelming support and a desire to avoid the delays associated with recording votes. If this were the case, then why would the House decide to record the near-unanimous votes cast to enact the Home Owners' Loan Act of 1933 (PL 43 adopted by a 383–3 vote) and the Liquor Taxing Act of 1934 (PL 83 adopted by a 388–5 vote) but fail to record a vote of any kind when enacting the Securities Act of 1933 (PL 22) or the National Housing Act of 1934 (PL 479)? By way of illustration, Table 1 lists six enactments for which a House roll call does not exist and for which overwhelming support was unlikely.

Congress	Statute Title	PL Number	Bill Number	Senate Vote
61	White Slave Traffic	PL 277	HR 12315	No
62	Department of Labor (creation)	PL 426	HR 22913	Yes
74	National Labor Relations Act (Wagner Act)	PL 198	S 1958	Yes
75	Federal Food, Drug, and Cosmetic Act	PL 717	S 5	No
87	Manpower Development and Training Act	PL 415	S 1991	Yes
91	Rail Passenger Service Act (Amtrak creation)	PL 518	HR 17849	No

 TABLE 1

 Significant Enactments with No Roll Call in the House

Was the creation of Amtrak uncontroversial? Why was there no roll call on the consequential National Labor Relations Act (Wagner Act)? Did the House not bother to record a vote on the Wagner Act an issue that deeply concerned southerners—because the necessary compromises had taken place in the Senate, because members wanted to hide their votes, or for some other reason? These questions are suggestive of the concerns raised by the discrepancy we document between laws and roll calls, and they highlight the importance of ensuring the adequacy of roll calls for researchers using roll calls to study lawmaking.

# 4. Comparing Roll Calls and Laws: Statute Level

Having characterized the empirical relationship between laws and roll calls and identified some discrepancies, we can now evaluate the possible reasons for this dissonance in terms of the incentives discussed in Section 2. Whereas our analysis in Section 3 examines how the aggregate number of laws with and without roll calls varies across time, in this section, we investigate the correlates of observing a roll call. That is, how do the observable characteristics of the laws that receive roll calls differ from those that do not? Some explanations depend on the characteristics of the statute itself, such as the noteworthiness of the statute or the issue being discussed, while others rely on differences in the political and institutional environments. Table 2 summarizes the predictions of Section 2 in terms of the available measures.

At the statute level, we control for policy content using a series of indicator variables derived from the policy issue codes of Katznelson and Lapinski (2006a and 2006b). In contrast with the previous issue codes-for example, those of Baumgartner and Jones (2005), Clausen (1973), Peltzman (1984), Poole and Rosenthal (1997), and Rohde (2004)—Katznelson and Lapinski's codes apply the same rubric to both roll calls and public statutes across the entire period we examined.<sup>9</sup> We also control for the congressional session of the enactment to investigate if lame-duck sessions and special sessions or electoral proximity (Session) affect the incentive to record a vote (for example, the 67th Congress had four sessions with two special sessions). Using the measures described in the previous section, we also devise indicators of the relative notability of the statute (Top 3,500, Top 500, and Top 250).<sup>10</sup> To control for political context, we examine whether, all else being equal, the incentives for position taking depend on the percentage difference in the size of the majority and minority party in the

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Concept	Variable	Expectation
Noteworthiness of Issue	Top 3,500, Top 500, Top 250	> 0
Political Context	Divided Government %Hdiff or %Sdiff	> 0 < 0
Decreased Voting Costs (Electronic Voting)	Post -92d	> 0
Exogenous Agenda Shock	War	< 0 (?)
Electoral Proximity	$Session_2 \times Pre-73d$ $Session_2$	< 0 > 0
Increased Individualism	Congress Time Trend	> 0
Non-electoral (Low Salient) Policies	District of Columbia, Particularistic Goods, Organization and Scope	< 0

# TABLE 2Expectations and Measures for Prevalence of Roll Calls

chamber of relevance (%Hdiff or %Sdiff) or divided party control of the government (Divided). We also note if there was a war in the year the statute was enacted (War).<sup>11</sup> Because of the institutional change resulting from the 1970 Legislative Reorganization Act, the advent of electronic voting in the House, and various other "sunshine reforms" that opened congressional proceedings to increased public scrutiny in the early 1970s (Roberts and Smith 2003; Smith 1989), we also include an indicator for the post-92d Congress (Post-92d Congress). The indicator Pre-73d Congress denotes the period during which the congressional calendar consisted of long-short sessions, prior to the Twentieth Amendment (which took effect January 1934, during the 73d Congress). Congress is a linear time trend.

Table 3 presents the percentage of all public statutes in each issue area receiving a roll call in both chambers, a roll call in the Senate but not in the House, a roll call only in the House, and no roll calls in either chamber. Overall, 88.30% of statutes lack a recorded final passage vote in either the House or Senate, 85.64% fail to receive a roll call of any kind, and the House is roughly three times more likely to record a vote on an enacted statute than the Senate is in every issue area.

Statutes dealing with domestic affairs are the most likely to receive a roll call, but 81.23% of domestic-affairs statutes nonetheless fail to

			Distributio	on of Statutes	and Roll Ca	alls			
		Final Pa	assage Votes			Vote of	Any Kind		
Issue	No Roll Call	Roll Call in Both	Roll Call Only in House	Roll Call Only in Senate	No Roll Call	Roll Call in Both	Roll Call Only in House	Roll Call Only in Senate	Total
Sovereignty	6,499 (94.97%)	61 (.89%)	246 (3.59%)	37 (.54%)	6,422 (93.85%)	90 (1.32%)	269 (3.93%)	62 (.91%)	6,843 (19.30%)
Organization and Scope	2,010 (88.98%)	71 (3.14%)	149 (6.60%)	29 (1.28%)	1,937 (85.75%)	109 (4.83%)	155 (6.86%)	58 (2.57%)	2,259 (6.37%)
International Relations	4,244 (82.57%)	339 (6.60%)	443 (8.62%)	114 (2.22%)	4,048 (78.75%)	465 (9.05%)	433 (8.42%)	194 (3.77%)	5,140 (14.50%)
Domestic Affairs	10,457 (81.23%)	814 (6.32%)	1,273 (9.98%)	329 (2.56%)	9,954 (77.32%)	1,208 (9.38%)	1,200 (9.32%)	511 (3.97%)	12,873 (36.31%)
District of Columbia	2,193 (93.20%)	25 (1.06%)	11 <i>5</i> (4.89%)	20 (.85%)	2,123 (90.23%)	49 (2.08%)	140 (5.95%)	41 (1.74%)	2,353 $(6.64%)$
Particularistic Goods	5,882 (98.63%)	8 (.13%)	65 (1.09%)	9 (.15%)	5,856 (98.19%)	13 (.22%)	75 (1.26%)	20 (.34%)	5,964 (16.82%)
Z	31,304 (88.30%)	1,318 (3.72%)	2,291 (6.46%)	538 (1.52%)	30,359 $(85.64%)$	1,934 (5.46%)	2,272 (6.41%)	886 (2.50%)	35,432

TABLE 3

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receive a roll call on final passage, and 77.32% fail to receive a recorded vote of any kind. Consistent with the incentives discussed in Section 2.1, statutes providing particularistic goods are the least likely to receive a roll call and 98.19% fail to receive a recorded vote.

Given the lack of roll calls for most statutes, evident in Figure 1 and Table 3, we restrict further analysis to the set of statutes likely to be of the most interest to existing and future scholarship—the top 500 (top 2%) and the top 3,500 (top 10%). We model the probability that a statute receives a recorded vote on final passage in both the House and Senate, but the difficulty of interpreting probit coefficients leads us to report both the coefficient estimates and the marginal effect (dy/dx) for a statute with median characteristics in Table 4. (*Domestic Affairs* and *Session*<sub>1</sub> are the omitted categories.)

Significant statutes are more likely to receive a roll call when we control for other aspects of the law. Relative to the predicted baseline probability of receiving a roll call of .170, the predicted probability for a Top 500 law receiving a roll call is .513, and the probability for a Top 250 law is even higher, because Top 250 laws are also coded as Top 500 laws.

Several temporal relationships are also evident. Recorded votes became more likely after the reforms of the early 1970s lessened the costs of recording a vote and expanded the set of issues on which a roll call could be requested to include amendments in the Committee of the Whole (two-sided *p*-value of .108) with a predicted increase of .065  $\pm$ /-.116. We also find that roll calls are more likely immediately preceding an election. All else being equal, statutes passed in the second session after the Twentieth Amendment became effective (in the 73d Congress) are more likely to receive a recorded vote by a statistically non-zero predicted effect of  $\pm$ .037 (although roll calls are equally likely for statutes enacted in either the long or short session prior to the 73d Congress).

Aspects such as divided government, the margin of majority control in the House, and the presence of an ongoing war do not, however, affect the probability of a final passage vote being recorded in both the House and the Senate. Consistent with the description of incentives for position taking on the provision of particularistic goods and the lack of roll calls for particularistic goods evident in Table 3, particularistic-goods legislation is the least likely of all policy areas to receive a roll call. Despite the lack of a predicted ordering for the importance of issue content for the probability of a recorded vote, statutes dealing with international issues are predicted to have the highest probability, once we control for other aspects.<sup>12</sup>

# TABLE 4

Probability of Recording Final Passage Votes in Both Chambers (standard errors in parentheses)

	Top 3,500 Statutes		Top 500 Statutes	
Variable	Coefficient	dy/dx	Coefficient	dy/dx
Constant	-1.870* (.426)		780 (.544)	
International Affairs	.400* (.055)	+.120 (.021)	.097 (.195)	+.038 (.078)
Sovereignty	048 (.085)	012 (.021)	.031 (.191)	+.012 (.076)
Particularistic Goods	410 (.377)	084 (.061)	-1.670* (.770)	411 (.085)
District of Columbia	.058 (.204)	+.015 (.054)	_	—
Organization and Scope	028 (.123)	007 (.030)	135 (.245)	053 (.095)
Top 500 Statute	.985* (.087)	+.343 (.035)	_	_
Top 250 Statute	.515* (.110)	+.160 (.041)	.537* (.115)	+.210 (.044)
Session <sub>2</sub>	.136*	+.037 (.023)	.154 (.173)	+.061 (.069)
$Session_2 \times Pre-73d$	112 (.153)	027 (.024)	118 (.247)	046 (.095)
Session <sub>3,4</sub>	056 (.114)	014 (.028)	.027 (.239)	+.010 (.094)
%Hdiff	.001	+.0001	006	003
Divided	.116 (.119)	+.030 (.033)	.259*	+.103 (.047)
War	035	009 (.037)	.154 (.159)	+.061 (.063)
Congress	.026* (.011)	+.007	.027*	+.010 (.005)
Pre-73d	.001	+.0002	.014	+.006
Post-92d	.233 (.194)	+.065 (.059)	.239 (.244)	+.095 (.097)
Baseline Predicted Probability	. ,	.170		.447
N	3,380		475	
PCP	74.0%		66.7%	
Null Classification Pseudo R <sup>2</sup>	69.7% .152		61.1% .101	

*Note:* Robust standard errors are clustered by Congress.  $*p \leq .10$ .

For those statutes ranked among the top 500 most significant statutes enacted between 1887 and 1994, there are relatively few systematic differences between the statutes receiving a recorded final passage vote in both the House and the Senate and those that do not, in terms of the available measures. As is the case for the top 3,500 statutes, statutes dealing with particularistic goods are less likely to receive final passage roll call in both the House and the Senate (-.411 + / .167), and statutes ranked in the top 250 most notable are significantly more likely to do so (+.211 + / .087).

Also interesting is the fact that, all else being equal, roll calls are more likely in periods of divided government than in periods of unified party control. Legislators appear more eager to take individual positions precisely when the attribution of governmental activity is the most difficult, with control of the legislative branches divided and both parties presumably attempting to position themselves to contest the branch outside of their political control. That this relationship does not exist in the House is curious, because electoral motivations are presumably stronger in the House.

Receiving a roll call in both chambers is a stringent threshold, so we also examine the probability that a statute receives, in each chamber, a roll call on final passage and a roll call of any kind. The Appendix reports the probit coefficients and model-fit statistics. Table 5 reports the predicted marginal effects for a statute of median characteristics. Many of the relationships evident in Table 4 also appear in Table 5.

Table 5 provides clear evidence that some aspects affect the probability of observing a roll call in either chamber, and it also refines the interpretation of the effects evident in Table 4 for the top 3,500 statutes. A recorded vote is more likely the more notable the statute is and if the statute was passed after the 92d Congress (although this condition does not affect the probability of recording a final passage vote) or addresses international affairs.

More-provocative conclusions emerge when we examine the factors correlated with the act of recording votes in each chamber. Roll calls are significantly more likely in the second session after the lame-duck second session was eliminated by the Twentieth Amendment only in the House. That roll calls are more likely in the House's second session is consistent with the possibility that roll calls are partially motivated by electoral considerations; such considerations are presumably stronger in the House than in the Senate, because only one-third of the Senate is up for reelection in any given second session.

A second refinement on the results of Table 4 is that statutes dealing with particularistic goods are less likely to receive a roll call

# TABLE 5 Impact on the Probability of Recording a Vote on Top 3,500 Statutes, by Chamber and Type (standard errors in parentheses)

	Pr(Final Passage Vote)		Pr(Any Vote)	
Variable	House	Senate	House	Senate
International Affairs	+.121* (.024)	+.118* (.021)	+.119* (.024)	+.120* (.022)
Sovereignty	043	025	059	114*
	(.037)	(.025)	(.041)	(.028)
Particularistic Goods	226*	+.015	251*	+.061
	(.089)	(.090)	(.093)	(.128)
Organization and Scope	+.035	014	+.004	007
	(.039)	(.032)	(.040)	(.039)
Top 500 Statute	+.287*	+.389*	+.259*	+.359*
	(.039)	(.033)	(.044)	(.030)
Top 250 Statute	+.213*	+.103*	+.175*	+.059
	(.051)	(.050)	(.063)	(.069)
Session <sub>2</sub>	+.059*	+.019	+.062*	+.034
	(.027)	(.024)	(.029)	(.026)
$Session_2 \times Pre-73d$	015	032	010	+.017
	(.063)	(.044)	(.072)	(.060)
Session <sub>3,4</sub>	026	015	024	+.049
	(.044)	(.025)	(.043)	(.042)
%Hdiff or %Sdiff	0002	+.002*	001	+.002
	(.002)	(.001)	(.002)	(.001)
Divided	+.025	+.069*	+.009	+.065*
	(.398)	(.040)	(.039)	(.037)
War	+.024	+.002	+.002	+.029
	(.044)	(.034)	(.041)	(.044)
Pre-73d	049	+.048	023	+.074
	(.094)	(.073)	(.107)	(.087)
Post-92d	+.102	+.097	+.154*	+.120*
	(.063)	(.073)	(.063)	(.060)
N	3,380	3,380	3,380	3,380
PCP	67.6%	68.3%	64.0%	61.5%
Null Classification	51.8%	60.6%	59.5%	55.6%
Pseudo R <sup>2</sup>	.112	.126	.074	.069
Baseline Predicted Probability	.409	.237	.475	.388

*Note:* Robust standard errors are clustered by Congress.  $*p \leq .10$ .

only in the House. As suggested in Section 2.1, this discrepancy is reasonable if public scrutiny is more problematic in the House, which is certainly plausible because not every senator is up for reelection and vulnerable to public scrutiny.

Finally, roll calls are more likely in the Senate when there is divided party control of the government, but there is no increased likelihood of roll calls in the House during such periods. Increased roll call activity during periods of divided government makes sense if members have a greater incentive to engage in position taking because of the political posturing of the two parties, but it is curious that a similar relationship is not also evident in the House.

At a minimum, the differences between the laws that do and do not receive a roll call suggest that roll call based measures are more informative about some issues and at some times than others. Somewhat more speculatively, we suggest that the evident relationships can be interpreted as legislators using roll calls to position themselves for upcoming elections in situations where credit claiming is difficult.

# 6. Discussion and Conclusion

This study is the first to systematically document the differences and similarities between laws and roll calls across policy issues over a one-hundred-year period in the United States Congress. Recent work by Carrubba et al. (2006) and Gabel, Carrubba, and Hug (2008) critiques the use of roll calls to analyze party discipline in the European Parliament and Swiss lower house, but prior investigations into whether or not roll call activity reflects lawmaking activity in the U.S. Congress have been largely impressionistic. Reliance on roll calls to study lawmaking and characterize the policymaking environment requires a more systematic understanding of the relationship between laws and roll calls, one that articulates the limitations of roll call based studies for our understanding of lawmaking. We contribute to this important task by documenting the nature of this relationship and highlighting the importance of explicitly acknowledging the potential limits of roll calls.

We find that studying lawmaking with roll calls is likely to prove useful only if the scholar restricts attention to the most prominent statutes, in which public positions are effectively compelled by the saliency of the issues, or if the scholar incorporates additional information and accounts for the selection mechanism of roll calls. Following recent arguments about the need to account for theoretical implications and the legislative agenda when analyzing roll calls (see Clinton and Meirowitz 2004), roll calls will likely be of greatest use in analyses that focus on lawmaking of landmark legislation, legislation of the contemporary (that is, mid-1970s and beyond) Congress, and policies whose roll call records can be inspected so as to ensure that the records adequately summarize congressional activity. Moving beyond such focused investigations requires that we directly confront questions about when and why roll calls exist and whether or not roll call based measures are appropriate for understanding lawmaking.<sup>13</sup>

Moreover, roll call based measures may not necessarily characterize the aspects of the political environment that are of interest, even if the lack of recorded votes is irrelevant for ideal point estimation techniques. If one's goal is to characterize political divisions and the level of contention in the legislature, then looking only at those incidents in which a roll call is requested will likely overstate the level of political disagreement—perhaps dramatically so. At a minimum, given the discrepancies we identify, we think it is incumbent upon the users of such measures to justify why they can safely ignore the massive amount of activity that occurs without a recorded vote.

Despite great advances in the study of member voting behavior, important, if not essential, questions remain. Poole (2005) concluded his recent treatise on the analysis of roll calls by noting, "The maps [of ideal points] are useless unless the user understands both the spatial theory that the computer program embodies and the politics of the legislature that produced the roll calls" (209). We may be on firm ground with respect to the former, but our foundations are shaky for the latter if we wish to use roll calls to study lawmaking. Critical questions arise from the fact that roll calls are a nonrandom reflection of congressional lawmaking activity, and much work remains.

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# Laws and Roll Calls

# APPENDIX Probit Coefficients for Table 5 (standard errors in parentheses)

(	Stanuaru	citors	ш	parentileses)	

	Pr(Final Pa	Pr(Final Passage Vote) Pr(Any		
Variable	House	Senate	House	Senate
Constant	923*	-1.63*	275	658*
	(.349)	(.402)	(.359)	(.366)
International Affairs	.306*	.345*	.300*	.304*
	(.060)	(.054)	(.061)	(.055)
Sovereignty	109	083	150	316*
	(.099)	(.085)	(.104)	(.083)
Particularistic Goods	673*	.048	696*	.157
	(.325)	(.283)	(.304)	(.324)
District of Columbia	.108	074	.483*	020
	(.166)	(.225)	(.167)	(.201)
Organization and Scope	.090	045	.011	020
	(.099)	(.108)	(.100)	(.102)
Top 500 Statute	.742*	1.04*	.688*	.951*
	(.107)	(.088)	(.128)	(.091)
Top 250 Statute	.541*	.304*	.447*	.151
	(.136)	(.136)	(.171)	(.174)
Session <sub>2</sub>	.150*	.059	.155*	.087
	(.071)	(.074)	(.075)	(.067)
$\text{Session}_2 \times \text{Pre-73d}$	039	108	026	.045
	(.163)	(.157)	(.182)	(.155)
Session <sub>3,4</sub>	066	050	061	.127
	(.116)	(.081)	(.109)	(.108)
Divided	.064	.208*	.023	.167*
	(.101)	(.115)	(.099)	(.094)
%Hdiff or %Sdiff	0004	.007*	004	.004
	(.004)	(.003)	(.004)	(.003)
War	.060	.008	.006	.074
	(.113)	(.111)	(.102)	(.113)
Congress	.020*	.023*	.008	.009
	(.009)	(.011)	(.009)	(.009)
Pre-73d	129	.148	058	.189
	(.252)	(.217)	(.269)	(.221)
Post-92d	.257	.288	.392*	.304*
	(.160)	(.207)	(.166)	(.150)
Ν	3,380	3,380	3,380	3,380
Pseudo R <sup>2</sup>	.112	.126	.074	.069

*Note:* Robust standard errors are clustered by Congress.  $*p \leq .10$ .

### NOTES

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1. Whereas the roll call record is well documented—see, for example, the exemplary collections of Poole and Rosenthal (1985, 1997) and Rohde (2004)—similar data collections and studies of policy outcomes across a comparable time horizon are rare (although see Baumgartner and Jones 1993, 2005). The scarcity of data on legislative enactments has made it very difficult to jointly study lawmaking and roll call voting and assess their relationship. Although other researchers collect this aggregate information—the annual *Vital Statistics on Congress*, for example, reports the number of bills passed and recorded votes—no one addresses the points we raise in response to the dramatic differences.

2. The modal investigation uses roll call data instead of information about actual enactments. This observation is not meant to deny the existence of much excellent work on enactments. For example, Fenno (1966, 1973) has examined how committees affect legislative outcomes well in advance of floor proceedings; Kingdon (1984) introduced the concept of policy windows without using roll calls; and Arnold (1990) has shown how pre-floor processes are affected by electoral forces. Mayhew's (1991) analysis of the impact of divided government on legislative productivity uses a time series of landmark laws constructed from coverage in the New York Times and Washington Post, as well as specialized policy histories, and Skocpol (1992) used careful historical work to document the development of social policy. Baumgartner and Jones (1993, 2005) examined lawmaking in the post-World War II period and concluded that lawmaking is characterized by surges and slumps, and Sinclair (2000) has used case studies to demonstrate that lawmaking is increasingly "unorthodox." Krehbiel appears to have recognized the difficulty of roll calls and chose an alternative measure of gridlock intervals relied on electoral returns in Pivotal Politics (1998, 58). Binder similarly used chamber differences in the support of conference reports to measure bicameral differences (2003, Appendix B).

3. In many instances, studying only those statutes that receive a vote may be sufficient, but we hope that characterizing the discrepancy between laws and roll calls at least prompts scholars to explain why the analyzed behavior is appropriate for the question of interest.

4. That said, very little work examines the incentives for recording a vote. Seminal works on voting behavior (e.g., Kingdon 1989) focus on explaining the vote itself, and models of voting focus on the decision to abstain or not (e.g., Cohen and Noll 1991).

5. The probability of observing a roll call if the statute is enacted is, critically, not the same as the probability of a bill receiving a roll call. Our investigation makes it tempting to reach for conclusions about the relationship between laws and roll calls in general, but such conclusions are, unfortunately, impossible without significant additional data collection efforts.

### Laws and Roll Calls

6. *Number of Votes* counts procedural motions and motions unrelated to bills (e.g., motions to adjourn and approve the *House Journal*). These are included because existing characterizations of the lawmaking environment (e.g., the calculation of gridlock intervals and measures of intraparty heterogeneity and interparty polarization) almost always include these votes.

Because formal lawmaking theories, such as the pivotal politics (Krehbiel 1998) and procedural party cartel (Cox and McCubbins 1993, 2005) theories, yield predictions about the nature of successful policy change rather than about what is attempted, scholars typically limit their analyses to the set of final passage votes. See, for example, Cox and McCubbins (2005); Krehbiel (1998, ch. 4); Krehbiel, Meirowitz, and Woon (2005); and Clinton (2007).

7. Mayhew (1991) used the last vote on a policy, whether a veto override, a conference vote, or the acceptance of the other chamber's bill. Krehbiel, Meirowitz, and Woon (2005) searched ICPSR codebooks for words associated with final passage votes. Chapter 5 of Cox and McCubbins (2005) describes their definition. Rohde (2004) classified the specific procedural motion but did not provide a definition of exactly which types of votes constitute "final passage."

8. Readers may be concerned that the notability of the statute is endogenous. We think it is not. The measure of significance does not directly involve accounting for the presence of a roll call (Clinton and Lapinski 2006). Moreover, reading the accounts used to construct the measure of significance provides no reason to believe that the chroniclers of congressional history were guided in their selection by the presence or absence of roll calls; most histories never mention floor activity and focus instead on the consequences of the enactment.

9. The first tier defines eight categories according to work in the Congress subfield, policy studies, and American political development: *Sovereignty, Organization and Scope, International Affairs, Domestic Affairs, District of Columbia, Public Quasi-Private, Quasi-Private, and Housekeeping.* 

10. If we omit statute significance (thereby risking the econometric problems that result from omitting relevant variables) and replicate the analysis, then we arrive at substantively identical conclusions about the effect of different policy areas on the likelihood of observing a vote.

11. The war measure includes the Spanish-American War, World War I, World War II, and Korea. Including the Vietnam conflict produces a dramatically different estimate, because that conflict spanned a period of great institutional and political change.

12. To interpret this prediction in light of the relationship evident in Table 2, recall that the regression analysis examines only the most significant legislation, whereas the analysis reported in Table 2 considers every enacted public statute.

13. If one's goal is to summarize member behavior across all votes to assess member position-taking behavior, then the issue is irrelevant, because the roll call record reflects the public record that the member chooses to establish.

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