6

Let's Vote

*The Rise and Impact of Roll Call Votes in the Age of Electronic Voting**

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THE HOUSE OF REPRESENTATIVES regularly uses one of two methods for voting on legislation, amendments, and procedural matters: voice votes and recorded (i.e., roll call) votes. Voice votes are most common and decide a question when no member of the House asks for a recorded vote.[1] Historically, recorded votes were used sparingly, in part because of the time commitment necessary. If a recorded vote was requested, approximately forty-five minutes were often re-

were used sparingly, in part because of the time commitment necessary. If a recorded vote was requested, approximately forty-five minutes were often required for a clerk to orally call the membership roll (Sinclair 1995, 69).

Beginning in 1886, some members expressed concern that roll call votes could be used by the minority party to slow down the legislative productivity of the House. Not only were roll call votes being used more often for final passage of legislation, but the minority could also request recorded votes on procedural questions. To address the time spent on floor voting, several proposals were introduced in the House to potentially automate the voting process.

While none of these early legislative proposals ever advanced beyond a hearing, the concept behind the proposals—speeding up an aspect of legislative floor action—opened a debate about tension between members of the majority and minority parties and strategies attached to voting in Congress. Connelly (2010) suggests that minority parties have long debated their role in government. The minority must decide whether to cooperate or be in opposition to the majority and whether to compromise with or confront the majority (18). Nowhere is this truer than in the House of Representatives, where the elected leaders of

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the chamber represent the majority party and historically have had the ability to control chamber activities and the scheduling of legislation (Cooper and Brady 1981; Krehbiel and Wiseman 2001).

Because of the majority's control of the legislative agenda, the voting process in the House matters. Electronic voting, for the first time, allowed the majority party to more quickly move through votes, thus providing opportunities to schedule additional bills and resolutions for floor debate.

Using electronic voting as a lens, this chapter explores early proposals for automated voting beginning in the nineteenth century to understand how rules structure outcomes in Congress. After framing the historic rationale for automating the voting process, the chapter discusses the passage and creation of the modern electronic voting system. The chapter then examines the connection between electronic voting (an operational change) on procedural activity, the impact of technology in the House, and issues of transparency that are raised through electronic voting. Finally, the chapter briefly examines patterns of roll call voting both before and after electronic voting and discusses the effects electronic voting has had on the House of Representatives.

History and Adoption of Electronic Voting

The first legislative proposals to create an automated voting system in the House of Representatives were introduced in 1886. As early as 1869, however, Thomas Edison had filed a patent for an "Electrographic Vote-Recorder" (Edison 1869; Thomas Edison Papers 2011). In 1890, Edison and his colleague Dewitt Roberts demonstrated the machine to Congress. As Edison recalled in an interview with *Harpers New Monthly Magazine*:

> We got hold of the right man to get the machine adopted, and I enthusiastically set forth its merits to him. Just imagine my feelings when, in a horrified tone, he exclaimed: "Young man, that won't do at all! That is just what we do not want. Your invention would destroy the only hope the minority have of influencing legislation. It would deliver them over, bound hand and foot, to the majority. The present system gives them a weapon which is invaluable, and as the ruling majority always know that it may some day become a minority, they will be as much averse to any change as their opponents." (Lathrop 1890, 431–32)

Early Legislative Proposals

In 1886, the first two legislative proposals to create an automated voting system were introduced. The first, introduced by Representative Lewis Beach, directed the Committee on Rules to "inquire into the feasibility of a plan for

registering votes" (Beach 1886). The second, introduced by Representative Benjamin Le Fevre, would have amended the rules of the House to allow for the "electrical recording of the yeas and nays" (Le Fevre 1886). Neither proposal received further consideration.

While Representatives Beach and Le Fevre did not get their proposals adopted, they established the basic legislative strategies that would be used for future automated voting proposals. Between 1886 and 1969, twenty-one representatives introduced a total of fifty-one proposals to install some type of automatic, electrical, or mechanical voting system in the House of Representatives. Like the proposals introduced by Representatives Beech and Le Fevre, subsequent proposals either directed the House to study the feasibility of automated voting or ordered the chamber to adopt automated voting technology.

After 1886, another proposal to use automated voting technology in the House was not introduced for twenty-eight years. In the 63rd Congress (1913–1914), Representative Allan Walsh introduced H.Res. 513, which would have created an electrical and mechanical system of voting for the House of Representatives (Committee on Accounts 1914). A special subcommittee of the Committee on Accounts held hearings on H.Res. 513 and discussed what an automated voting system might look like. The report described a system in which each member would have his own voting box with a unique key. Votes would be transmitted electrically and recorded mechanically by a machine

an automated voting system might look like. The report described a system in which each member would have his own voting box with a unique key. Votes would be transmitted electrically and recorded mechanically by a machine installed on the clerk's desk, with votes displayed on boards throughout the chamber and in the cloakrooms (Committee on Accounts 1914, 4–6).[2] No further action was taken on H.Res. 513.

In the 64th Congress (1915–1916), a similar proposal (H.Res. 223) was introduced by Representative William Howard. Hearings were held by the Committee on Accounts in which testimony was heard from outside experts, including representatives of a company then installing an electrical voting system in the Wisconsin legislature (Committee on Accounts 1916a; Holst 1919, 53). H.Res. 223 was favorably reported by the Committee on Accounts, but was not acted upon by the House (Committee on Accounts 1916b).

During hearings on H.Res. 513 and H.Res. 223, three major themes on the potential impact of automated voting emerged: the length of time needed to conduct a vote, the accuracy of automated roll call systems, and the cost of developing and implementing a vote-recording system. Each would be major points of debate for all automated voting proposals introduced between 1913 and 1970.

Time Needed to Vote

During testimony on H.Res. 513, Representative Walsh stated that "taking 45 minutes as the average time consumed in a roll call, the time consumed in the

Sixty-second Congress in roll calls was 275 hours, or 55 legislative days" (Walsh 1914, 9). Members of the Committee on Accounts, however, were concerned that shortening votes could "flood the country with legislation" and disrupt then-used delaying tactics, resulting in "filibuster by means of roll calls" (Committee on Accounts 1914, 9). Although the Committee on Accounts eventually recommended the adoption of an automated voting system, there was still considerable division over the system's desirability. The committee's majority found that an electrical and mechanical system could help members save time and avoid the practice of reading each name twice for every roll call vote and quorum call. Conversely, the minority opposed the concept of an electronic system and the potential loss of floor time on legislation prior to casting a vote (Committee on Accounts 1916b, 2).

In 1923, the time savings potentially associated with automated voting was again highlighted in a Committee on Accounts report on H.Res. 497, introduced by Representative Melville Kelly. H.Res. 497 would have provided "for the purchase and installation of an electromechanical voting system in the House of Representatives."[3] In the committee report, it was noted that similar resolutions were favorably reported by the committee in the 63rd and 64th Congresses and "it was also shown that a great saving in times could be affected [*sic*] in the calling of the roll in the House by the use of one of these voting machines" (Committee on Accounts 1923, 1).

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Representative Charles Bennett, a longtime proponent of automated voting, strongly believed that automated voting would not only save the House time by reducing the amount required for a vote, but could force members to be present in the chamber and engaged in debate more frequently. Representative Bennett recounted the a story of a member who would go home between votes, knowing that he could make it back to the Capitol in time for the next vote, since it often took more than forty-five minutes to call the roll (Bennett 1952, 59). Automated voting proposals aimed to end this type of practice and allow the House to conduct more roll call votes using less time.

Accuracy of Automated Roll Call Votes

Hearings on automated voting proposals also discussed members' concerns about voting mistakes using an electrical and mechanical system. In 1914, during hearings on H.Res. 513, Representative Walsh testified that the voting system he envisioned would automatically cut off after a prescribed time to end a vote. In instances where a member missed a vote, Representative Walsh's proposal left the decision on whether the member would be allowed to vote up to the Speaker of the House (Committee on Accounts 1914, 10–11). When Representative Howard introduced H.Res. 223 in 1916, the resolution allowed

for vote changes either through the mechanical system or through a more traditional paper method.

Cost of Developing and Implementing a Vote-Recording System

The cost of developing and implementing an automated voting system permeated the debate on early proposals. In addressing cost, Representative Walsh testified that his proposed voting system was estimated to cost no more than $25,000 (Committee on Accounts 1914, 12). In the 64th Congress, however, the report recommending adoption of Representative Howard's resolution estimated that an automated voting system would cost approximately $125,000 (Committee on Accounts 1916a, 4). By the 91st Congress (1969–1970), the cost of an electronic voting system was estimated between $80,000 and $600,000, with $500,000 considered adequate to install a comprehensive system (Committee on House Administration 1969, 7).

Adopting Electronic Voting

Interest in an automated voting system continued to grow in the House, with fifty-one bills and resolutions introduced between 1886 and 1970. In 1970, Congress undertook a comprehensive reorganization for the first time since the

Legislative Reorganization Act of 1946 (Davidson, Oleszek, and Lee 2008, 351). The Legislative Reorganization Act of 1970 (P.L. 91-510) took many provisions from previously introduced legislation and provided for electronic voting in the House generally and on recorded votes on floor amendments in the Committee of the Whole (Dodd and Oppenheimer 1977; Schickler 2005, 52).

Prior to 1970, it was relatively easy for a committee chair to defeat floor amendments, because votes on amendments were generally not recorded. Because votes were not recorded, constituents often did not know how individual representatives had voted. In the absence of constituent pressure, committee chairs were well positioned to defend bills against floor assaults. By providing the public with information on how individual members voted on amendments, the Reorganization Act fueled floor amending activity and thereby weakened the position of the chairs (Schickler 2005, 52).

Proposals

On January 6, 1969, the Democratic Caucus adopted a resolution asking Speaker of the House John McCormack to "take such steps as may be necessary to improve the vote recording procedures in the House of Representatives" (House Democratic Caucus Records 1969). In response to the Democratic Caucus's

request, Speaker McCormack asked the Committee on House Administration to examine automated voting.

In response to the Speaker's request, the Committee on House Administration established a special subcommittee on electrical and mechanical office equipment. In April 1969, the subcommittee held a hearing to focus on electrical and mechanical voting (Committee on House Administration 1969, 7).[4] No specific legislative action resulted from the committee hearing, however, but the hearing served as a preview for the debate over electronic voting in 1970.

Electronic Voting Provisions in the Legislative Reorganization Act of 1970

The Legislative Reorganization Act of 1970, as introduced and reported in the House, did not initially include provisions to create an electronic voting system in the House (House Committee on Rules 1970). On July 27, 1970, Representative Robert McClory offered a floor amendment to authorize the development of an electronic voting system and to amend then House Rule 15 to allow the system to be used to conduct votes and quorum calls in the House. The amendment was agreed to by voice vote.

Work on the electronic voting system began almost immediately after President Richard Nixon signed the Legislative Reorganization Act of 1970 into law on October 26, 1970. While use of the electronic voting system was to begin on January 3, 1973, Speaker Carl B. Albert announced that the voting system was

on October 26, 1970. While use of the electronic voting system was to begin on January 3, 1973, Speaker Carl B. Albert announced that the voting system was not yet operational and that "members will be given sufficient notice as to when the electronic voting system will be activated" (Albert 1973). The electronic voting system was used for the first time on January 23, 1973, for a quorum call.

Electronic Voting and House Operations

The adoption of the Legislative Reorganization Act of 1970 marked the beginning of a period of change in the House. While the act prescribed numerous changes to almost all aspects of House operations and functions, electronic voting signaled the modernization of chamber operations and a shift in attitude toward incorporating technology in day-to-day operations. The impact of electronic voting in the House has been significant. Electronic voting has had consequences for House operations, technology and modernization, and transparency.

Operational Change

In institutions, rules often structure outcomes. For the House, the majority party has almost complete control over setting the rules at the beginning of each Congress and setting the terms of debate on individual pieces of legislation brought

to the floor. In fact, the Committee on Rules is one of the only House committees that has an overwhelming membership imbalance in favor of the majority, regardless of the majority's size, and therefore has been characterized as "an essential arm of the majority party leadership" (Dion and Huber 1996, 26).

Rules, precedents, and norms are designed by the majority in an effort to control the chamber. Ostrom (2005) describes these as "institutional statements" that provide guidance to members and "prescribe, permit, or advise action or outcomes for participants in an action situation" (138). For the House of Representatives, rules are generally adopted at the beginning of each Congress. Introduced by the majority, the rules package is largely based on the rules from the previous Congress, with some modifications. In addition to the rules, the House parliamentarian has compiled numerous volumes of precedents to guide the Speaker in making decisions on the House floor. The rules and precedents, together with the institutional norms of the House, constitute the "institutional statements" of the chamber.

The power of the "institutional statements" should not be underestimated. Agenda setting is one of the spoils of majority party status. In 1970, Democrats—then in the midst of a forty-year period of majority status in the House—saw numerous advantages to allowing electronic voting and making the operational and structural changes necessary to accommodate more frequent and shorter votes. Since its implementation, electronic voting has provided opportunities for both the majority and minority to request additional roll call votes without

votes. Since its implementation, electronic voting has provided opportunities for both the majority and minority to request additional roll call votes without the consequence of losing floor debate time. While rules changes generally favor those making the rules, the procedural changes made for the electronic voting system has empowered both the majority and minority.

Technology and Modernization

In general, the House is slow to change and modernize, especially with the adoption of technology. As the story of the adoption of electronic voting illustrates, the process of adopting technology on a chamber-wide level often takes years. The debate over the placement of television cameras in the House chamber and the possible ramifications of providing live access to House proceedings also developed over a number of years (Garay 1984; Frantzich and Sullivan 1996; Wolfensberger 2000, 103–21). To maintain control over the images and content of House proceedings, rules were adopted to limit potential embarrassment to members and ensure that only official business was covered (Frantzich 1982, 99). While the television networks did not initially appreciate the restrictions, the public was able to receive real-time access to House floor debates through C-SPAN and other outlets.

Additionally, the House has, at times, been reluctant to allow for the adoption of technology for individual member use. In the late 1960s, the House charged

the Committee on House Administration with creating and maintaining lists of approved technology that could be purchased using official funds.[5] More recently, the House has grappled with members' desires to use social media to contact their constituents (Straus et al. 2010).

In many ways, the successful adoption of electronic voting paved the way for the House to more easily adopt additional technology. While there are no direct links between the adoption of electronic voting and other technological upgrades, the relative ease of designing and implementing electronic voting likely provided members with more confidence in technology. Today, the House uses technology for many aspects of its operation, including sending dear colleague letters (Straus 2009), communicating with constituents (Straus et al. 2010), and creating public information portals and websites (Adler, Gent, and Overmeyer 1998).

Transparency

Transparency has been a buzzword in recent congresses. In both the 111th and the 112th Congresses numerous bills were introduced to "open" Congress and make congressional records more accessible to the general public.[6] These bills continue the tradition of past House rule changes and administrative actions that have required committee reports, financial statements, and bills and

bills continue the tradition of past House rule changes and administrative actions that have required committee reports, financial statements, and bills and amendments be placed online in a timely fashion. Congressional action of this nature was sought by some because many of the general federal open government provisions did not apply to Congress.

Electronic voting is another tool Congress has at its disposal that increases transparency. The electronic voting system allows the real-time display of votes during a roll call. Where once party leadership had to manually count how a member was voting, today, voting display boards throughout the House chamber show the aggregate number of "yeas" and "nays," while other boards list each member and how he or she has voted.

The historic debate on the advantages and disadvantages of electronic voting in many ways hinged on transparency. Throughout the early debate in the 1914 and 1916 Congresses, members were concerned about the transparency of their votes and the consequences of public and lobbyist access to voting information prior to publication in the *Congressional Record*. Members were also concerned about lobbying by other members during votes, whether votes could be changed once they were cast but before voting time expired, and if changes would be published in the *Record*.

Electronic voting has also allowed the House the flexibility to conduct as many roll call votes as are requested by the membership. While in the past roll call votes took a significant amount of time, today they can generally be dispensed with in no more than fifteen minutes.[7] This change is significant for transpar-

ency. Since 1973, the number of opportunities to put members on the record for non-final-passage votes has increased. Current House rules allow for the recording of votes on amendments in the Committee of the Whole and for a member to request recorded votes on a variety of motions during regular debate. While the overall time for votes may be less than before electronic voting, the total number of roll call votes has increased (see figure 6.1).

Roll Call Voting Studies

The adoption of electronic voting was not, by itself, a catalyst for roll call voting studies. What electronic voting provides is an enhanced opportunity to analyze roll call votes and the institutional impact of voting. This type of analysis stands in contrast with traditional roll call voting studies, which tend to evaluate individual member votes, analyze the roll call voting patterns of groups of legislators, or examine voting on a specific policy area.

Poole and Rosenthal (1997) devised a widely used systematic statistical approach to analyzing roll call votes. In their NOMINATE and DW-NOMINATE scores, Poole and Rosenthal built on previous roll call studies of member voting along party lines (Weisberg 1978; Poole and Rosenthal 1985) to create a systematic and reliable statistic for measuring individual voting behavior.

Using NOMINATE and DW-NOMINATE, many roll call voting studies began focusing on how individual members voted vis-à-vis their party leadership. The study of party unity votes allowed the development of measures examining individual members' loyalty to the party agenda. As a result of the increased scrutiny of individual and party voting patterns, analytics were created to allow the measurement of disagreement between legislator and party on any given vote (Rohde 1991, 8). This measure has increased understanding of the dynamics between individual members and party leadership positions, with majority/minority status, unity of the opposition party, and electoral outcomes identified as strong predictors of party influence in Congress (Lebo, McGlynn, and Koger 2007). Additionally, party unity votes have been used to show that majority party members who vote with the party leadership are more likely to be successful in the House (Hasecke and Mycoff 2007).

In addition to studies on party loyalty, roll call voting studies have generally focused on individuals or groups of legislators. These studies have examined roll call votes for a specific demographic—such as women, blacks, or Hispanics (Schwindt-Bayer and Corbella 2004; Hogan 2008; Rocca, Sanchez, Nikora 2009; Frederick 2010), specific policies (Dunlap and Gale 1974; Gross 1979; Xie 2006), presidential positions on legislation (Covington 1987; King and Riddlesperger 2006; Conley and Yon 2007), constituency connections (McDonagh 1989; Wolman and Marckini 2000; Clinton 2006; Ansolabehere

and Jones 2010), and elections (Deckard 1976; Kuklinski 1977; Thomas 1985; Wright 2007; Hirano 2008). Such studies add to the overall understanding of how individual members choose to vote in the House, but none examine broader institutional implications of vote choice by members.

As these roll call studies show, the focus is generally on the individual member, not the institution. Very few studies focus on the institutional implications of roll call voting. Riker (1986), for one, discusses institutional effects through an example of how not voting during a roll call can aid a party in defeating legislation. Riker argues that a single Virginia state senator's refusal to vote on the Equal Rights Amendment to the U.S. Constitution caused the amendment to be defeated (Riker 1986, 103–5).

The power of a single vote and the implications of strategic voting by a party or group of members should not be underestimated. For example, in the 112th Congress (2011–2012), during debate on the fiscal year 2012 budget, the Republican leadership brought competing budget plans to the floor. One, sponsored by Budget Committee chair Paul Ryan, was backed by the Republican Party leadership, and the other was compiled by the conservative Republican Study Committee (RSC). In an effort to force the House to adopt the more conservative budget plan, minority leader Steny Hoyer organized a group of about 120 Democrats to vote "present" on the RSC budget (Sonmez 2011). By organizing votes of "present" instead of "no," Mr. Hoyer reduced the number of votes nec-

essary to adopt a proposal and nearly succeeded in forcing passage of the more conservative measure.

Studying overall roll call voting patterns, instead of focusing on how individual members vote, allows us to understand how electronic voting has changed the way roll call votes are used on the floor. Since the first electronic vote was cast in 1973, asking for and conducting roll call votes has become easier. What was once a long and sometimes tedious procedure has become routine. What once required the parties to maintain running tallies of member votes is now fully automated, with electronic boards throughout the chamber displaying both running vote totals and the votes of individual members.

Impact of Electronic Voting

Adoption of electronic voting in 1970, and the first use of the system in 1973, gave the House the ability to quickly and accurately record votes. As a consequence the total number of roll call votes per Congress has increased. Increases in the number of roll call votes, however, began prior to the adoption of electronic voting. Between the 80th Congress (1947–1948) and the 92nd Congress (1971–1972), the number of roll call votes rose, but only slightly. Following the passage of the Legislative Reorganization Act of 1970, the number of roll call

votes began to rise more rapidly, peaking in the 95th Congress (1977–1978) before stabilizing at about nine hundred roll call votes per Congress. In recent years, the number of roll call votes has begun a dramatic increase to more than eighteen hundred roll call votes in the 110th Congress (2008–2009).

Between 1946, when the last major rules changes were implemented with the passage of the Legislative Reorganization Act of 1946, and 1972, the average number of roll call votes per Congress was 286, with the most roll call votes (949) taken in the 92nd Congress and the fewest (147) taken in the 83rd Congress (1953–1954). Following the passage of the Legislative Reorganization Act of 1970 and the implementation of electronic voting in 1973, the average number of roll call votes has increased to 1,169 per Congress, with the most votes (1,865) taken in the 110th Congress and the fewest (812) taken in the 97th Congress (1981–1982). Figure 6.1 shows the total number of roll call votes taken in each Congress between the 80th Congress and the 111th Congress (2009–2010).

As shown in figure 6.1, the number of roll call votes per Congress began increasing prior to the adoption of electronic voting. Beginning in the 89th Congress (1965–1966), the number of roll call votes began to climb from an average of 195 votes per Congress between the 80th and the 8[illegible]th Congresses (1967–1968) to 394 roll call votes in the 90th Congress (1967–1968). The decision to adopt electronic voting l[illegible]ly occurred partly in response to the increasing number of roll call votes and the increase in floor time being spent on voting.

Once electronic voting was adopted, however, the number of votes continued to increase because of the ease of conducting a vote under the new system.

Rules Changes

Since 1970, two major rules changes have been adopted by the House that affect the number of roll call votes taken during a given Congress. The first,

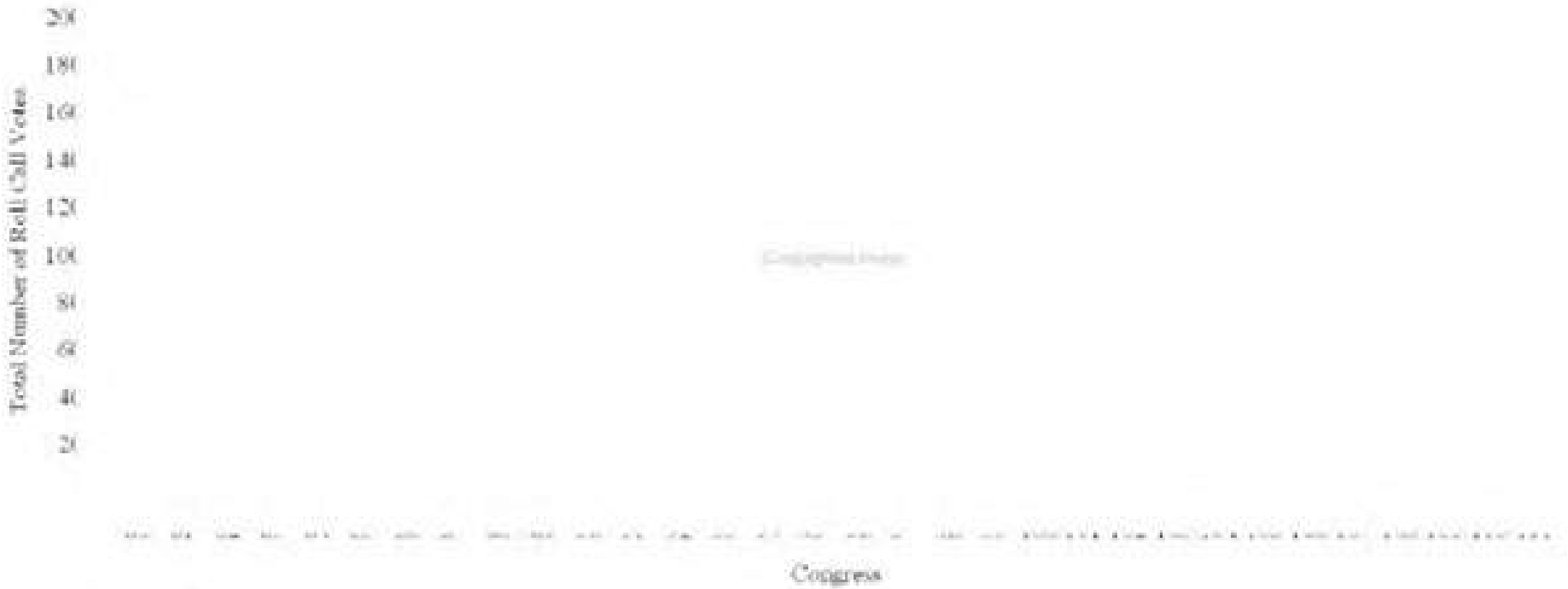

FIGURE 6.1
Total Roll Call Votes in the House of Representatives (80th–111th Congresses). (Poole and Rosenthal, "Democrat and Republican Party Voting Splits Congresses 35–111" [updated January 9, 2011], http://www.voteview.com/partycount.htm)

adopted as a provision of the Legislative Reorganization Act of 1970, allowed recorded votes in the Committee of the Whole. The second, adopted in the 93rd Congress (1973–1974), allowed the Speaker (or chair of the Committee of the Whole) to cluster votes and to reduce voting time after the first fifteen-minute vote. Both of these changes provided increased opportunities to obtain a recorded vote in the House.

Record Voting in the Committee of the Whole

As part of the Legislative Reorganization Act of 1970, House rules were amended to accommodate the use of electronic voting. Prior to the act, House rules only permitted unrecorded votes in the Committee of the Whole by voice, division, or tellers. For voice votes, the chair determines which position prevails by the number of members answering "yea" or "nay" verbally (Kravitz 2001, 275). For both division and teller votes, the number of members on either side of a question, but not their names, were recorded and reported in the *Congressional Record* (Kravitz 2001, 86–87 and 258).

The act amended the rules for voting in the Committee of the Whole and, for the first time, authorized the recording of votes and the publishing of individual voting positions. Subsequently, post-1970 roll call vote totals include

votes on amendments in the Committee of the Whole in addition to regular procedural and final passage votes. As figure 6.1 shows, the number of roll call votes began to increase in the 92nd Congress, corresponding with the first full Congress operating under the Legislative Reorganization Act's amended voting provisions. The increase in roll call votes in the 92nd Congress, therefore, is a function of both the ease of voting electronically, compared to a manual roll call, and the increase in opportunities to request a vote on amendments in the Committee of the Whole.

Clustered and Reduced-Time Votes

Prior to the Legislative Reorganization Act of 1970, all roll call votes were conducted in roughly the same length of time—approximately forty-five minutes. With the first use of the electronic voting system, House rules were amended to reduce the amount of time required to conduct a recorded vote. In the 93rd Congress, the House agreed to H.Res. 998, which allowed votes to be clustered on motions to suspend the rules. Further rules changes were made in subsequent congresses, including providing the Speaker with "discretionary authority to postpone recorded votes on the final passage of bills, the adoption of resolutions and conference reports to a time certain within two legislative days" (Deschler and Brown 1976, 396) and authorizing the presiding officer to

cluster votes on the previous question motion and the adoption of resolutions reported by the Rules Committee (396–99).

House rules were also amended to authorize a reduction in voting time for clustered votes—"sequential recorded votes in the House on a series of measures or amendments that the House finished debating at an earlier time or on a previous day" (Kravitz 2001, 43). Instead of requiring that all clustered votes be conducted in no less than fifteen minutes, the new rules allow the presiding officer to "reduce the voting time on passage of a bill to five minutes, following a 15-minute vote" (Deschler and Brown 1976, 449). The postponement and clustering of votes provided the majority leadership a powerful tool that, combined with electronic voting, has resulted in an overall reduction of time for subsequent votes and allowed additional roll call votes without halting debate. Clustering and then shortening vote times has allowed individual members, including the party leadership, to use voting as a tactic to require other members to state a position on the record.

Prior to electronic voting, if a member, during a vote, wanted to know how other members were voting, he or she had three options. She could ask her party's leadership to check its tallies, she could ask other members, or she could stay on the floor for the entire vote and observe other members answering the call of the roll. With the implementation of electronic voting, this strategy changed. Because of the electronic display boards, members can now see how others have voted in real time and make decisions with more complete information.

Additionally, shortened vote times allow the chamber to function more effectively. Committee hearings and other business can be conducted away from the floor without the constant need to return to vote. By clustering votes and reducing voting time, it is easier for the party leadership to keep members on the floor when they know a series of votes will occur. In the 112th Congress, House rules were further amended to allow certain votes in a series to be reduced to two minutes. This should further allow the House leadership to schedule votes and reduce the time the chamber is required to spend voting on resolutions, bills, and motions.

Major Membership Transitions

Part of the recent increase in the number of roll call votes appears to be membership-centric, mostly surrounding majority party transitions. As figure 6.1 shows, following the adoption of electronic voting, there were three peaks in the number of roll call votes per Congress. The first occurred following the 1974 elections—and continued through the 95th Congress—when a large class of freshmen Democrats were elected, bolstering the ranks of the Democratic majority. The other two peaks occurred with the transition in majority party—from

Democratic to Republican in the 104th Congress (1995–1996) and from Republican to Democratic in the 110th Congress.

Watergate Democrats

The increase in roll call votes in the 94th and 95th Congresses can be explained in a number of ways. First, the increase in the number of roll call votes could be a continuation of the upward trend in requesting roll call votes that began in the 89th Congress. This explanation suggests that as requesting roll call votes became easier and more politically viable, the membership availed itself of the opportunity and continued to request more votes. Second, the large class of freshmen that entered in the post-Watergate election desired to place themselves on the public record as often as possible. This could have been to demonstrate that they were different from their older counterparts or to ensure that they established political track records early in their careers in an effort to maintain their positions in Congress.

Finally, the increase in roll call votes in the early 1970s could be a reflection of newness of the electronic voting system. While it is true that the number of roll call votes per Congress was increasing prior to the adoption of electronic voting, once electronic voting became available, and voting became faster and easier, members wanted to vote more often. In fact, the number of roll call votes in the 95th Congress was not eclipsed until the 110th Congress, a period of twenty years.

Following the Republican takeover of the House in the 104th Congress, the number of roll call votes increased to levels not seen since shortly after the electronic voting system's introduction. The increase in roll call votes in the 104th Congress was likely a function of the Republican leadership's desire to take multiple votes on campaign agenda items (e.g., the Contract with America) and to put members on the record supporting or opposing these items (Cheney and Cheney 1996; Fenno 1997; Killian 1998).

For example, in January 1995, the House debated its version of a bill to fulfill a Contract with America pledge to prohibit unfunded mandates by the federal government. During the course of the debate on H.R. 5, the Unfunded Mandate Reform Act of 1995, the House utilized an open rule and took forty votes on amendments and motions related to the bill, both in the Committee of the Whole and in the House. In addition, several quorum calls and votes on motions to adjourn and motions to rise were also recorded during the course of debate. The idea of taking more than forty roll call votes during debate on a single piece of legislation would have been unthinkable prior to electronic voting, as the time needed would have caused the House to cease additional work.

Partly because of electronic voting, the new Republican majority was able to use the electronic voting system to its advantage and allow votes on numerous amendments, without concerns about allotting additional time to voting. Allowing numerous amendments and votes serves two purposes. First, by allowing an open rule (per the terms of H.Res. 38, which set the rules for debate on H.R. 5), the new Republican majority demonstrated that they were willing to allow an open amendment process, even for important agenda items. Second, conducting roll call votes for so many amendments put members on the public record. Conducting many votes early in the Congress also allowed the majority leadership to see where members stood on Contract with America items generally, and on issues raised through the amendment process specifically.

Democratic Takeover

Similarly, the number of roll call votes increased when the House transitioned from a Republican to Democratic majority in the 110th Congress. While the Democratic Party did have a legislative plan for the first hundred days, it was not a unifying document like the Contract with America. They did, however, have an extensive agenda of leadership-sponsored measures. Many of these, including H.R. 547, the Advanced Fuels Infrastructure Research and Development Act,

had multiple roll call votes on amendments in the Committee of the Whole and final passage. While there were not nearly as many roll call votes as on H.R. 5 in the 104th Congress, having multiple recorded votes, especially on amendments in the Committee of the Whole, would have been untenable prior to the amendments to House rules made to accommodate the electronic voting system.

Creating a Public Voting Record

Since the implementation of electronic voting, there has been more floor time for members to request roll call votes. While members have always been able to request recorded votes (Galloway 1958, 457), the time needed to fulfill that request often caused the chamber to hesitate prior to granting the roll call vote. Members request roll call votes for any number of reasons. These include establishing visibility and forcing their political opponents (most often members of the opposing party) to vote on measures not popular among their supporters. Each of these is a legitimate reason for requesting a roll call vote and each has its own unique set of consequences.

Visibility

Cain, Ferejohn, and Fiorina (1987) discuss the importance of visibility for members of Congress, calling it the "cornerstone of an effective district strategy"

(27). Visibility, however, is just one of many factors members must consider when performing their official functions. To ensure reelection, members must connect with their constituents and prove their legislative and representative worth (Mayhew 1975; Fenno 1978). Additionally, members must remember that they are operating within the "public sphere" and that their actions can have consequences beyond a specific roll call vote (Mayhew 2000).

Roll call votes can impact elections. How a member votes is a direct reflection of his or her strategy for representing the district. Erickson and Wright (2000) remind us that constituency service and accurately reflecting the district's interests is essential for member reelection. In fact, while no member represents his or her district exactly the same way as another member, a "member who ignores constituents is likely to be given the boot by the voters" (149). By being an active participant in the roll call voting process, members can ensure their visibility. Electronic voting allows members to be more visible than ever. Instead of a few hundred votes a year, members now take well over a thousand and have ample opportunity to establish voting track records.

Cornering a Political Opponent

In some cases, members may request a roll call vote in an effort to put a political opponent on the record. More often than not, this happens for measures that are politically unpopular for the opposition party. In making these requests, members are using the electronic voting system to potentially score political points or stop legislation they are strongly opposed to. Sometimes called killer amendments, these measures are often designed to "kill" the underlying piece of legislation, if they are adopted (Davidson, Oleszek, and Lee 2010, 279). Jenkins and Munger (2003) provide a historic example of a killer amendment. In the 42nd Congress (1871–1873), a bill was introduced to reimburse the College of William and Mary for property destroyed during the Civil War. After a heated debate, Representative John Shanks offered an amendment that would have required the college to allow open and equal enrollment for all in order to receive the funds (505–6). As a result of the amendment, which was adopted by the House, the underlying bill was defeated.

Interestingly, prior research has indicated that killer amendments are not an effective legislative strategy for killing the underlying bill, with the underlying bill failing only on rare occasions (Wilkerson 1999). If introducing and forcing votes on killer amendments are not effective, then why do they occur? While the ultimate answer to this question is beyond the scope of this chapter, electronic voting plays a central role in the decision to introduce and request a roll call vote on a killer amendment. Since roll call votes were allowed in the Committee of the Whole, forcing a vote on a killer amendment can require members to go on the record in support or opposition of a controversial

matter. Regardless of whether members believe they are voting strategically (Enelow 1981), the vote can be analyzed out of context for political reasons and provide important campaign material.

Strategic Voting

The adoption of electronic voting changed the strategy of voting in the House of Representatives. Prior to 1973, when members came to the floor to cast roll call votes, they were required to cast their votes in public (i.e., orally respond to the clerk reading the roll). Because of the public nature of voting, members might choose to vote early in the process, or they might choose to wait until the second call of the roll to determine how other members were voting. Either choice could require the individual member or the party whip to closely observe voting activity on the floor in an effort to pick the optimal voting time.

Since the adoption of electronic voting, the act of voting has become private. When members vote today, they take their voting card, insert it into a voting station, and press a button that corresponds with their vote choice (Clerk of the House 2011). Once they vote, however, their choice immediately becomes public on display boards located throughout the Hall of the House. The electronic display boards stay illuminated for the duration of the vote, and other members

can very easily see how their colleagues have voted. In the current scenario, when a member votes could be strategically important. McCrone (1977) examined roll call votes to identify member voting strategies. In his analysis, McCrone identifies four strategies by combining the content of a specific vote and the general support for the measure in an effort to predict how a member will vote (McCrone 1977, 178–80).

What McCrone does not identify, however, is the timing of a member's vote. This is significant because electronic voting provides the opportunity for members to clearly see how others voted and allows members to adjust their votes, without a change being recorded in the *Congressional Record*. For each vote, each member must decide the best time to vote (i.e., early or late) and whether to change a vote once it has been cast. Further examination of the timing of votes is virtually impossible in the modern House. Because there is no way to know exactly when or in what order a member votes, strategy associated with vote timing is restricted to arguments on public position-taking (Caldeira and Zorn 2004) or party influence on individual roll calls (Synder and Groseclose 2001).

Open Government and Media Scrutiny

In many ways, the adoption of electronic voting by the House marked a period of transition to a more open government. While the merits of open government are outside the scope of this chapter, more information exists on

member behavior and position-taking today then ever before because of electronic voting and the expansion of recorded votes.

While electronic voting has had far-reaching consequences for chamber operations, it has also had broad consequences for media examination of member activity. The rise of CNN, Fox News, MSNBC, and non-TV news outlets has led to media analysis of member activity in ways that were inconceivable in the era before cable TV and Internet news services. Electronic voting and the associated increase in the number of roll call votes have provided members with the ability to put themselves on the record and to demonstrate to their constituents that they are listening to their preferences and acting on them in Congress. Reporting roll call voting positions is undoubtedly a piece of a member's reelection strategy (Mayhew 1975). It can, however, also provide opponent campaign material. The labyrinth of possible roll call votes in the House continues to leave many congressional observers confused about how a member voted on everything but final passage.

The use of electronic voting in the House has also made it easier for interest groups to follow and grade members (Jackson and Kingdon 1992; Poole and Rosenthal 1997; Groseclose, Levitt, and Snyder 1999). The most famous of these scores are produced by the Americans for Democratic Action (ADA) and the American Conservative Union (ACU), but almost all interest groups create some kind of "score" that shows how closely member votes align with the group's position. These scores are invaluable for group members, who can use them

when contacting their representatives or when deciding whether to support the incumbent in future elections.

Studies on congressional behavior and member activities are almost sure to use Poole and Rosenthal's (1997) DW-NOMINATE scores. These studies have, and can continue to be, invaluable to students of Congress. As we move forward with using roll call votes as a proxy for congressional and legislative behavior, it continues to be important to remember how the current system for recording roll call votes developed and the implications for analysis as more and more votes are recorded in the House of Representatives.

Conclusion

The adoption of electronic voting by the House of Representatives changed more than just the way members vote. Rules changes adopted alongside the adoption of electronic voting provided the majority leadership with powerful tools with which to influence legislative outcomes. Electronic voting served as a significant tool for implementing other institutional changes, including cluster voting, the further adoption of technology, and increased transparency in the voting process. Additionally, electronic voting has allowed more recorded votes using less floor time, thus putting members on the record more often.

Roll call votes can be a useful tool to examine certain aspects of legislative behavior. Scholars who choose to use roll call voting as the basis of their studies, however, must consider how electronic voting has changed member behavior. Prior to 1973, members were at the mercy of party leadership, the media, and their own observations when determining how other members were voting. Today, all a member has to do is look up at the display boards and see what color dot appears next to their colleague's name. The increase in information available in real time to members has undoubtedly changed voting strategies.

Electronic voting has also impacted the organization of party leadership (see chapter 2), the design of special rules for legislative floor consideration (see chapter 3), voting on amendments to appropriations bills (see chapter 4), the ability of the minority to request votes on the motion to recommit (see chapter 5), and strategies employed by caucuses on the House floor (see chapter 7). While elements of each of these themes were present prior to electronic voting, electronic voting has streamlined the gathering and processing of information for all members.

Notes

1. Under House rules, some questions require a recorded vote. For example, House Rule 20, clause 10 provides that the Speaker order the "yeas and nays" for questions "on passage of a bill

or joint resolution, or on adoption of a conference report, making general appropriations, or increasing Federal income tax rates, or on final adoption of a concurrent resolution on the budget or conference report thereon."

2. The buttons on the voting box would indicate "yea," "nay," "present," and "paired." When a button was depressed, the appropriate light would come on next to the member's name in the appropriate column.

3. H.Res. 497 (67th Congress) was introduced on January 29, 1923. See also "Public Bills, Resolutions, and Memorials," *Congressional Record*, vol. 64, part 3 (January 29, 1923), 2678.

4. In the 86th Congress (1959–1960), the Committee on House Administration renamed the Subcommittee on Office Equipment as the Special Subcommittee on Electrical and Mechanical Office Equipment. The Subcommittee on Office Equipment had been created during the 84th Congress (1955–1956).

5. Between 1955 and 1968, the Committee on House Administration had a Special Subcommittee on Electrical and Mechanical Office Equipment. This subcommittee was in charge of approving office equipment, among other items, available for purchase by member and committee offices. For more information, see U.S. Congress, House of Representatives, *Guide to the Records of the United States House of Representatives at the National Archives: 1789–1989*, 100th Cong., 2nd sess., H.Doc. 100-245 (Washington, DC: Government Printing Office, 1989).

6. For examples of legislation to promote congressional transparency, see H.R. 4983 (111th Congress) and H.R. 2340 (112th Congress), introduced by Representative Mike Quigley.

7. Pursuant to House Rule 20, clause 2 (a), the minimum time for a recorded vote or quorum call is fifteen minutes, except as authorized under Rule 20, clause 8 or clause 9, or Rule 18, clause 6(f), where the Speaker may reduce to five minutes the minimum time for electronic voting under certain conditions. Under a rules change adopted by the 112th Congress, the chair of the Committee of the Whole may reduce to two minutes the voting time on questions following a fifteen-minute vote.