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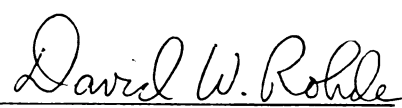
The Electoral Consequences of Position Taking
in Congress: The Impact of Roll Call Behavior
on Electoral Fortunes

presented by

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Major professor

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**THE ELECTORAL CONSEQUENCES OF POSITION TAKING IN CONGRESS:
THE IMPACT OF ROLL CALL BEHAVIOR ON ELECTORAL FORTUNES**

By

Jamie L. Carson

A DISSERTATION

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ABSTRACT

THE ELECTORAL CONSEQUENCES OF POSITION TAKING IN CONGRESS: THE IMPACT OF ROLL CALL BEHAVIOR ON ELECTORAL FORTUNES

By

Jamie L. Carson

How does the voting behavior of representatives in Congress affect their electoral fortunes? While much has been written to date on congressional elections, we lack a comprehensive study that predicts when, and under what conditions, positions taken on roll call votes produce electoral consequences. This dissertation seeks to fill this void in the congressional elections literature. In Chapter 1, I provide a brief introduction to the central research questions employed in this dissertation. In Chapters 2 and 3, I analyze key roll call votes from both the House and the Senate since the early 1970s to assess how and when legislators are rewarded or punished at the polls for their position taking behavior on roll call votes. I find that a wide-range of roll call decisions yield electoral consequences at the margins for members of Congress. I also show that the extent to which a given roll call is controversial, salient, and a catalyst for intra-party disagreement affects whether it has electoral implications. In sum, my analysis explains both when and why legislators are rewarded or punished at the polls for their position taking behavior in Congress.

In Chapter 4, I test an assumption that is implicit in much of the work on U.S. congressional elections—that strategic politicians regularly monitor the roll call voting behavior of members of Congress. In the context of candidate competition in House and Senate elections, I employ a strategic choice analysis to examine the incidence of quality

challenger emergence and incumbent retirements for the 1976-2000 election cycles.

Most notably, I find that experienced candidates are more likely to run against legislators who regularly vote with their party on key votes. I also find that the amount of money raised and spent by the challenger does not always have a deterrent effect on challenger entry. In terms of incumbent career decisions, I find that the emergence of a quality candidate can deter an incumbent from seeking another term of office, irrespective of their political position in their chamber. In the concluding chapter, I summarize the central findings of the dissertation and raise potential issues for consideration in future research.

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For my Mother and Father

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CHAPTER 1

INTRODUCTION

During the past 30 years, students of congressional elections have documented a fairly stable pattern in the context of House and Senate elections: the relative ease with which incumbents seem to get reelected. Beginning with the work of scholars who first recognized the underlying advantages of incumbency (see, e.g., Erikson 1971a; Mayhew 1974b; Ferejohn 1977; Cover 1977; Fiorina 1977) and continuing with more recent and innovative attempts to estimate the extent of that advantage in congressional elections (see, e.g., Gelman and King 1990; Cox and Katz 1996, 1999; Erikson and Palfrey 1998; Ansolabehere, Snyder, and Stewart 2000; Brady, Cogan and Fiorina 2000), political scientists have widely examined both the causes and consequences of this recurring phenomenon. To some, the incumbency advantage is indicative of an electorate that is, by and large, content with the performance of its elected representatives. To others, it raises potential concerns about the issue of democratic accountability, often resulting in increased demands for campaign finance reform or enactment of term limits for incumbents—issues that have received widespread attention since the early 1990s.

On the whole, concern about democratic accountability has sparked an interest among students of congressional elections to investigate the extent to which legislative behavior has discernible electoral consequences. While some scholars have focused on the electoral rewards associated with distributive benefits (see, e.g., Bickers and Stein 1994, 1996; Alvarez and Saving 1997; Sellers 1997), others have examined the potential advantages linked to casework (Alford and Hibbing 1981; Serra and Moon 1994) and incumbents' roll call voting records (Erikson 1971b; Wright 1978; Jacobson 1993).

Though far from conclusive, these studies offer evidence that legislators typically receive marginal benefits from these and other activities. This, of course, has been a source of concern among journalists, pundits, and scholars alike who question whether potential advantages that accrue to incumbents makes it impractical for quality candidates to mount an effective campaign. One student of congressional elections summed up the state of affairs in the following statement:

Elections are supposed to be the means by which the public exercises control over its government. If elections are competitive this system works well. People are faced with viable options and make their choices. But if the deck is somehow stacked so that one candidate is virtually guaranteed victory, then public accountability is undermined (Krasno 1994: 5).

After all, how can we expect incumbent legislators to be responsive to their constituents if they have little reason to believe that they will be defeated in the upcoming election?

Clearly, congressional incumbents spend a substantial amount of time engaging in activities that they anticipate will cultivate a sense of loyalty with their constituents and improve their chances of reelection. Indeed, Mayhew (1974a) finds that legislators split their time between advertising, credit claiming, and position taking to facilitate their goal of getting reelected. Fenno (1978) observes that incumbents cultivate a personal “home style” with their constituents in an attempt to foster a sense of trust and loyalty among prospective voters. Fiorina (1989) argues that Congress is responsible for the creation of a Washington establishment that allows individual legislators to frequently engage in pork barrel and casework activities, which curries favor with constituents. Incumbents also raise large sums of money with the expectation that it will enhance their prospects

for reelection by discouraging the emergence of experienced, prospective challengers (Hersch and McDougall 1994; Box-Steffensmeier 1996).

As the preceding studies suggest, there is little doubt that legislators believe that their actions and behavior impact their electoral fortunes. Because legislators are directly elected by the people, most (if not all) recognize the importance and necessity of being responsive to their constituents. Given that they also possess a finite amount of time and scarce resources, we should not expect them to act frivolously in terms of the allocation of these limited resources. Moreover, the extent to which we evaluate an incumbent as “marginal” or “safe” is largely contingent upon the activities that the legislator engages in while in office. Incumbents who appear “out of touch” with their constituencies will generally have a much harder time getting reelected than those legislators who attempt to maintain a connection with their voters. As Mayhew (1974a: 37) contends, “what characterizes ‘safe’ representatives is not that they are beyond electoral reach, but that their efforts are very likely to bring them uninterrupted electoral success.”

Despite the perceptions of legislators, students of elections remain surprisingly agnostic about the degree to which legislative behavior affects incumbents’ electoral fortunes. While involvement in a scandal could spell disaster for an incumbent’s career in either the House or Senate (see, e.g., Welch and Hibbing 1997), there is less evidence supporting the notion that an incumbent’s day-to-day activities will consistently yield observable effects (either positive or negative) during the subsequent election. Indeed, reconciling this apparent puzzle between legislators’ beliefs and the findings of the extant literature has preoccupied the attention of a number of scholars interested in better understanding the dynamics of electoral politics (see, e.g., Fiorina 1977; Johannes and

McAdams 1981; Alford and Hibbing 1981; Jacobson 1987; Abramowitz 1991; Cox and Katz 1996; Bianco, Spence, and Wilkerson 1996; Gaines and Nokken 2001).

In continuing in this same tradition, this dissertation examines an issue that has received comparatively less attention in the congressional elections literature—electoral accountability in the context of roll call voting. Students of congressional behavior have long recognized that legislators act strategically when expressing a public position on the House or Senate floor when voting on legislation. More specifically, scholars agree that legislators seeking to be reelected express positions that can be considered political commodities in and of themselves (Mayhew 1974a; Fiorina 1974; Kingdon 1989; Arnold 1990). Nevertheless, these same scholars have noted that it can be difficult at times to find evidence that election results are impacted by legislators' position taking behavior.

One congressional scholar who has written about this relationship, R. Douglas Arnold (1990: 37), describes the challenges associated with studying the electoral effects of position taking behavior in the following illustrative example:

If legislators consulted the scholarly literature on congressional elections, they might conclude that they need not worry much about either the positions that they take or the effects that they produce because these are not the major determinants of electoral outcomes. This would be a dangerous conclusion. It would be equivalent to concluding that one need not file a tax return because the Internal Revenue Service prosecutes only a few thousand individuals each year for tax evasion. The problem is that legislators as a group have not offered congressional scholars much variance to analyze. No legislators have offered to take positions directly opposite to their electoral interests so that we may measure the full impact of positions on electoral margins. None have acknowledged selecting their positions by flipping a coin. Legislators as a group have been quite uncooperative in providing scholars with the kind of evidence we would need to assess the potential importance of issues in congressional elections.

Nevertheless, Arnold maintains that it is a worthwhile venture to continue to investigate the potential electoral consequences of position taking behavior in Congress.

The preceding discussion raises a number of potentially interesting questions for students of congressional elections. To what extent does roll call behavior of incumbents affect their electoral fortunes? Are incumbent legislators routinely held accountable for the positions they express on roll call votes? Do certain types of votes have a greater impact on electoral fortunes than others? Are senators more or less insulated electorally from position taking behavior than their counterparts in the House? Are experienced challengers attuned to the position taking behavior of incumbent legislators as students of congressional elections typically assume? The answers to these questions have notable implications for issues of representation and accountability. Indeed, if representative democracy is working, then constituents should have the opportunity to reward or punish incumbents, depending on whether legislative decisions reflect their interests.

Extant research examining the linkage between legislative behavior and election outcomes provides some preliminary evidence suggesting that patterns of behavior on highly salient roll calls may impact incumbents' electoral fortunes. To date, however, we lack a comprehensive study that predicts when, and under what conditions, positions expressed on roll call votes will yield electoral consequences. This dissertation attempts to fill this void in the congressional elections literature with a large-scale investigation of the relationship between roll calls and electoral fortunes. In particular, I examine the electoral implications of hundreds of roll call votes in both the House and the Senate from the 1970s, 1980s, and 1990s and arrive at new insights regarding when, and under what conditions, position taking affects incumbents' electoral fortunes.

This dissertation suggests that the positions legislators take on *individual* roll call votes can, and do, have observable effects in terms of their electoral fortunes. Generally speaking, we should expect constituents to evaluate a legislator based partly upon his or her voting record in Congress. Just as issues are of notable consequence in presidential contests (Page 1978; Fiorina 1981), it should come as no surprise that issues produce at least marginal, observable effects for incumbent legislators since there is considerable overlap in the voters who select both sets of candidates. As Arnold (1990: 38) maintains, “The more one finds evidence that issues matter in presidential elections, the more one must accept the possibility that, under the proper conditions, issues could become equally important in congressional elections.” In the context of Senate elections, Kahn and Kenney (1999) conclude that issues often play a prominent role during the campaign due to the greater competitiveness and intensity associated with Senate elections.

The amount of attention afforded a particular roll call should also be a significant factor in determining whether or not positions taken have observable electoral effects. When a representative takes a specific position by casting a vote on a given issue, he or she is engaging in highly visible behavior; one cannot avoid going on the record with an announced roll call vote (Kingdon 1989). Since we should theoretically expect roll call votes to reach different levels of salience based largely on the nature of the issue under consideration and the degree of consensus/controversy among the members, the electoral impact of roll call votes will vary. What remains unclear is the degree to which, and the conditions under which, roll call votes become electorally salient. Accordingly, this dissertation seeks to address long-standing questions regarding how and when legislators are rewarded or punished at the polls for their position taking behavior in Congress.

In departing from the traditional format, this dissertation combines three separate, but interrelated essays addressing issues of electoral accountability and position taking in both chambers of Congress. In the first essay, I focus on the electoral consequences of position taking on roll call votes in the context of U.S. House elections from 1974 to 2000. The analysis includes a much larger number of roll call votes than previous studies and I examine their effects individually to understand which, if any, yield observable electoral consequences. In particular, I consider the electoral effects of all *Congressional Quarterly* (CQ) “key votes” in the House from the early 1970s to the present. I focus specifically on CQ’s key votes in this analysis to gain a better understanding of when prominent roll call votes that are reasonably well known to both political elites and voters will have observable electoral effects. As I argue in the dissertation, this subset of votes provides a useful starting point for the analysis since these votes represent a fairly broad picture of the diverse agenda dealt with by the House across congressional sessions.

Beyond speaking to the frequency of electorally consequential roll calls, the first essay also attempts to offer insights into the conditions under which position taking yields observable electoral implications. While the preliminary analysis is useful for determining which votes *are* and *are not* electorally consequential, it does not reveal why some votes yield discernible electoral effects while others do not. Nevertheless, these initial findings play a pivotal role in helping us to begin to identify factors impacting whether or not positions on key votes will impact incumbents’ vote margins. Using these results as the dependent variable for the second part of this study, I am able to test a model where the roll call vote is the unit of analysis. This, in turn, provides a unique opportunity to examine factors such as the saliency and level of consensus on the vote to

determine if they are significantly related to the likelihood of yielding observable effects for incumbent legislators.

The second essay also focuses on the issue of electoral accountability and roll call voting, but does so in the context of Senate elections held since the early 1970s. While the electoral effects of roll call voting in the House of Representatives has been given limited consideration in the extant literature, virtually no attention has been devoted to studying the same relationship in the U.S. Senate. This essay seeks to remedy this oversight by examining both the frequency of and the conditions under which positions on key roll calls exert electoral implications for incumbent senators. Given that this analysis parallels the one performed on the House, I am able to make comparisons and draw distinctions between the two chambers. Thus, I can show how and why positions on key votes impact incumbents in both chambers while also highlighting differences resulting from electoral, institutional, and political factors unique to each chamber.

The third essay departs from the initial analyses by testing an assumption implicit in the first two essays—that experienced candidates routinely scrutinize position taking behavior of legislators to determine whether or not they should emerge to challenge the incumbent. Building upon the work of previous scholars who have explored the issue of candidate competition in congressional elections, I examine the impact of roll call voting behavior on candidate emergence from the mid-1970s to the present. Unlike previous work, however, I control for the effects of both selection bias and strategic interaction through the use of a strategic choice model developed by Curtis Signorino (2001). This model allows me to investigate strategic factors influencing candidate emergence while simultaneously controlling for events affecting an incumbent’s decision to seek reelection

or retire. From this, I offer new insights on candidate competition that calls into question many previously accepted conventions regarding electoral politics.

In the concluding section of the dissertation, I draw out the larger implications of the results reported in each of the three separate essays. While many of the findings presented in this dissertation challenge the conventional wisdom concerning position taking on roll call votes and electoral accountability, other results serve to independently confirm conclusions that are commonly held in the congressional elections literature. Overall, I believe that the findings from each of the three essays add significantly to our understanding of electoral politics, particularly with regard to the electoral impact of legislative behavior. I hope the results reported in this dissertation will encourage others to continue to advance our understanding of House and Senate elections with respect to both institutional and political behavior.

CHAPTER 2

ELECTORAL ACCOUNTABILITY AND ROLL CALL VOTING IN THE U.S. HOUSE

Students of legislative behavior have long recognized that members of the U.S. Congress are strategic when they take public positions (e.g., when casting roll call votes on the House or Senate floor). As legislators pursue reelection, the stances they take on issues can be political commodities in and of themselves. As Mayhew (1974a: 69-70) and others have noted, however, it is difficult to find systematic evidence of legislators' "position taking" behavior affecting election results. To what extent does roll call voting affect congressional elections? The answer to this question has important implications for issues of representation and accountability. Indeed, if representative democracy is working, then we should observe constituents rewarding or punishing incumbents based on whether legislative decisions reflect their interests.

Case study research exploring the relationship between specific important roll calls and election outcomes offers us some preliminary evidence suggesting that patterns of behavior on certain key roll calls affect incumbents' electoral margins. Yet, to date we are left without a comprehensive study that tells us about the *frequency* of electorally consequential roll calls and lends insight into the *conditions* under which position taking has electoral implications. This chapter takes a step toward filling that void through a large-scale investigation of the relationship between roll calls and election results in the context of elections to the House of Representatives. More specifically, I examine the electoral implications of "key" roll call votes from the 1970s, 1980s, and 1990s to arrive at new generalizations regarding how and when position taking affects electoral fortunes.

My results demonstrate that, after controlling for the usual factors, a wide range of roll calls have significant effects on incumbents' electoral margins. I also find that the extent to which a particular roll call is controversial, salient, and a catalyst for intra-party disagreement affects whether it has observable electoral implications. In sum, my central findings begin to address long-standing questions regarding how and when legislators are rewarded or punished at the polls for their position taking behavior in Congress.

The organization of this chapter is as follows. I begin by reviewing the existing literature linking position taking behavior with electoral outcome and clarify how the empirical work presented in this paper is different. Then, I present theoretical evidence detailing both when and why roll call votes should become electorally consequential. Next, I formulate and conduct an empirical test of the electoral effects of roll call voting in the House from the early 1970s to the present. Building on these findings, I then examine why some roll calls, and not others, have observable electoral consequences. Finally, a concluding discussion summarizes the principal implications of the results and suggests avenues for further research.

Literature Review: Defining the Scope of Current Evidence

Mayhew (1974a) views legislators as single-minded seekers of reelection and, in turn, draws some general conclusions about expected legislative behavior. According to Mayhew's theory, legislators employ some combination of three fundamental activities in their attempt to garner electoral support: advertising, credit claiming, and position taking. While the electoral effects of advertising (see, e.g., Mayhew 1974b; Cover and Brumberg 1982) and credit claiming (see, e.g., Rivers and Fiorina 1989; Stein and Bickers 1994;

Alvarez and Saving 1997; Sellers 1997) have been widely explored in the congressional literature, substantially less attention has been given to the electoral consequences of position taking behavior in Congress.

Extant research on the relationship between legislative behavior and election outcomes offers an interesting puzzle to students of congressional elections. On the one hand, surveys of individual members consistently show that legislators believe the positions they take on roll call votes impact their electoral fortunes (see, e.g., Froman 1963; Clausen 1973; Matthews and Stimson 1975; Kingdon 1989; Sullivan, Shaw, McAvoy, and Barnum 1993). Yet, some recent literature finds little to no evidence of legislative behavior affecting elections, suggesting that legislators may not need to be very concerned about the potential electoral implications of position taking (see, e.g., Bianco, Spence, and Wilkerson 1996; Ansolabehere, Snyder, and Stewart 2001; Gaines and Nokken 2001).¹ If this is indeed the case, why might legislators worry about the potential electoral effects of their position taking behavior? Mayhew (1974a), Fiorina (1974), Jacobson (1987), Kingdon (1989), and Arnold (1990) all emphasize that incumbents are extremely sensitive to the potential electoral implications of their votes, and as a result, behave strategically when announcing a position on a roll call vote.²

¹ While not focusing explicitly on roll call voting, Jacobson and Dimock (1994) and Groseclose and Krehbiel (1994) present an alternate view on the electoral effects of member behavior in connection with the House banking scandal, showing that members may face consequences even if they do not expect their actions to become widely publicized.

² Representatives who occasionally take roll call positions that are “out of touch” with their constituencies will not necessarily be removed from office. As a result of comfortable electoral margins, incumbents often have a considerable degree of leeway that allows them to take some controversial positions. In any case, because so few incumbents are defeated from one election to the next, we cannot expect to find any large-scale evidence of roll call behavior impacting electoral *wins* vs. *losses*. When position taking does underlie winning vs. losing, it presumably involves a “lagged” effect. As electoral margins narrow as a result of more and more “wrong” positions, experienced challengers are more likely to emerge, which gradually translates into narrower margins and eventually seat turnover. For a more detailed discussion of this phenomenon, see Froman (1966).

Early research on the effects of position taking questioned the possibility of a relationship between legislators' behavior and election outcomes because of voters' tendencies of apathy and ambivalence toward politics. Stokes and Miller (1962), among the first to explore this question, used survey evidence to show that voters are indeed apathetic toward politics and therefore few take the time to gather information regarding specific issue positions of congressional candidates. Lacking information about their representatives, voters are portrayed as incapable of holding incumbents accountable for decisions in office (Stokes and Miller 1962: 545). One implication is that incumbents do not need to be too concerned with the electoral consequences of position taking since so few constituents pay attention.

Schoenberger (1969), on the other hand, highlights an important link between legislative position taking and electoral outcomes in his study of the 1964 congressional elections. Challenging the established notion that campaign platform positions play a minor role in determining electoral outcomes, Schoenberger finds that those Republican incumbents who took a favorable public position toward Goldwater did substantially worse in the 1964 elections than those who did not. Thus, in contrast to Stokes and Miller, Schoenberger concludes that the relationship between position-taking and election returns is indeed significant.

Since the early 1970s, the effects of position taking have generally been analyzed in terms of floor roll call voting behavior (and almost exclusively with respect to the House).³ Moreover, literature examining the relationship between position taking and

³ While Mayhew (1974a) describes other activities beyond roll call voting in his discussion of legislative position taking (e.g., floor addresses, speeches, television appearances, press releases), I focus solely on the effects of position taking behavior on House roll calls. In future work, I plan to focus on other aspects of position taking to determine if they yield related consequences for incumbent legislators.

election outcomes generally falls under one of two alternative empirical approaches. The first approach focuses on how *aggregate* voting records affect electoral outcomes. These analyses typically examine differences between representatives and their constituents by either exploring ideological extremeness on all roll calls or distinctiveness as measured by a limited, subset of roll calls (e.g., those on which ADA scores are based). Generally, the more legislators' roll call choices depart from constituent ideology, the more their vote margins in subsequent elections are expected to diminish.

The second approach focuses on the electoral effects of a single roll call vote or a particular subset of votes in Congress. These studies explore whether the positions that legislators express on roll calls significantly affect the size of the vote margin by which they are reelected (or, defeated). Scholars examine whether controversial positions taken on highly visible or salient votes in Congress have a significant and measurable impact on the percentage of the vote that incumbent legislators receive.

In connection with the former empirical approach, Erikson (1971b) was among the first to systematically explore the relationship between roll call voting in the House and electoral returns. The central question of his analysis is whether legislators are rewarded or punished at the polls on the basis of their aggregate roll call record even though relatively few constituents regularly monitor their behavior. Using electoral and survey data from 1952 to 1968, Erikson tests the hypothesis that voting behavior in congressional elections is influenced by the degree to which the incumbent's roll call behavior reflects his or her party's ideological extreme. He finds that the evidence is inconclusive for Democratic legislators; however, the results support the hypothesis that the degree of conservatism among Republican legislators had a considerable negative

effect on their vote margins (i.e., the more conservative a Republican's voting record was, the more his vote margin was reduced). Although Erikson cautions that the small nature of the sample necessitated that his findings be taken with caution, he suggests that they are "sufficiently provocative" to warrant further analysis (1031).

In his analysis of the 1974 congressional elections, Burnham (1975) identifies a general pattern in legislative behavior that echoed the findings of both Schoenberger and Erikson. Based on aggregate voting patterns, Burnham finds that electoral losses among House Republicans in the 1974 elections were greatest among the conservative members of the party. As had been the case in the 1964 congressional elections, a relationship emerged between the degree of policy liberalism among Republican incumbents and their relative success on election day (Burnham, 418). Although Burnham acknowledges that it is possible only to draw limited inferences from the aggregate analysis, his findings suggest that Stokes and Miller may have underestimated the policy attentiveness of voters, at least during the 1974 elections.

Following up on the work of Erikson and Burnham, Wright (1978) challenges the argument advanced by scholars such as Stokes and Miller in attempting to determine whether candidates' issue positions actually do have an effect on their electoral margins. Using the 1966 NBC survey of candidates for the House and the SRC national election survey, Wright examines the electoral impact of policy positions of candidates. He finds that, contrary to much of the existing literature, constituents often behave as though they are attentive to individual candidates and that positions taken on policy issues affect the manner in which voters make up their minds on election day. Interestingly, Wright explains that it is not necessary for issues to account for much of the variance in election

outcomes since electorally insecure legislators only require minimal incentives to take note of the policy interests of their constituents (446). Moreover, he concludes that, "...since the candidate's issue stance is one of the few factors relevant to his reelection that is also within his control, the representative is well advised to bring his issue positions into line with those of his constituency. Not to do so could be the determining factor in electoral defeat" (459).

To examine the impact of issue positions on electoral outcomes, Serra and Moon (1994) employ a district-level analysis to determine whether constituent service and relative issue proximity affect vote choice. Prior to their study, Serra and Moon note that the criteria by which voters reward legislators for casework and issue positions had not been adequately addressed. To explore this dynamic more systematically, they conduct telephone interviews with two groups of constituents from one congressional district to determine the effects of casework separate from incumbent positions. Their results suggest that while casework does seem to make a difference in terms of increasing the legislator's evaluation and recognition, the effects of the incumbent's issue positions cannot be discounted (205). Indeed, Serra and Moon suggest that legislators seem to do better the more attention they devote to both casework and issue considerations (211).

In a series of collaborative essays, Erikson and Wright (2001) have taken their respective analyses of voters, candidates, and issues in congressional elections one step further by focusing on long-term electoral trends. From their analysis of election returns over time, they argue that not only are incumbents required to be fairly attentive to their districts, but they must also take into consideration the policy interests of constituents since failing to do so can result in electoral defeat. Although Erikson and Wright do not

look at the effects of roll call voting on electoral returns, they do suggest that legislators who stray from the party's ideological norm may be more at risk in upcoming elections (145).⁴ Also, Erikson and Wright maintain that incumbents who represent "safe" districts are more likely to diverge in their roll call behavior than non-safe incumbents (147). This finding may suggest that voters are more attentive to certain types of votes in Congress, especially those that result in legislators taking controversial positions.

In a recent study, Canes-Wrone, Brady, and Cogan (2002) explore the connection between members' electoral margins and overall support for their party and demonstrate that legislators are indeed accountable for their roll call voting behavior. Using data from the 1956-1996 elections, they find that incumbents receive smaller electoral margins on average the more they vote in support of their party across roll calls. They also show that this effect is comparable to other determinants of electoral margins including challenger quality and campaign spending. Finally, they argue that the distinction between "safe" and "marginal" members is tenuous at best, since this phenomenon affects all members equally, regardless of their previous electoral performance.

Unlike studies based on aggregate voting patterns or behavior, other research has explored the electoral implications of a single vote or certain types of votes in the House.⁵ Jacobson (1993), for instance, offers a compelling case study of budget deficit reduction legislation in 1990 that includes evidence of how roll call positions influence election outcomes. Jacobson's fundamental argument is that electoral circumstances strongly shape the positions taken by members of Congress—and vice versa. Those legislators in

⁴ In a similar study, Ansolabehere, Snyder, and Stewart (2001) find that candidates' vote share is inversely related to support for the party's ideological extreme.

⁵ For a related study focusing on the potential electoral consequences of abstentions (shirking) on roll calls, see Rothenberg and Sanders (2000).

a position to absorb the costs associated with supporting the 1990 deficit reduction bill could vote for it while those members who could suffer at the polls as a result had to vote against it (Jacobson 1993: 376; for a related discussion, see Mann and Wolfinger 1980: 629). The prediction, then, is that House members who supported the deficit reduction package should not incur any particularly serious electoral damage despite its tax hikes and cuts in popular spending.⁶ Indeed, Jacobson's analysis estimates the impact of roll call votes regarding deficit reduction on the incumbent's share of the two-party vote in the 1990 House elections and shows that supporting Bush's budget deal only hurt those incumbents in vulnerable districts.

Following up on the previous study, Jacobson and Bovitz (1998) investigate more generally the electoral conditions shaping House incumbents' decisions on budget-related roll calls as well as the effects these votes had on subsequent election returns. Jacobson and Bovitz examine 43 key budget-related votes from 1981-1996 to explore the linkage between electoral politics and budgets. Jacobson and Bovitz conclude, "loyalty to the party's positions on difficult budget votes was regularly penalized on election day" (20). Even though their findings only speak to the relationship between *budget* votes and electoral results, they suggest a broader implication that legislative position taking regularly has consequences on election day.

While research to date has provided us with some insights regarding the effects of legislative behavior on election outcomes, in some ways the two approaches described above can only give us a limited understanding of how roll call voting impacts election returns. In particular, studies that rely on aggregate measures of legislative behavior are

⁶ Jacobson also finds that the risk to legislators supporting the bill was reduced since the number of quality challengers running in the 1990 election was relatively low.

unable to distinguish the electoral relevance of one vote from another. Since all or even a subset of votes are considered together, we do not have the opportunity to determine which specific votes, if any, are having a significant effect on an incumbent's margins.

In terms of the second approach, analyses examining the electoral implications of one or even a few votes in Congress are valuable case studies, but they do not allow for broader generalizations. In particular, these types of analyses do not tell us whether other roll call votes will have significant electoral effects. Without looking at a broader subset of roll calls that legislators take positions on, we cannot begin to understand the degree to which Congress's diverse legislative agenda impacts members' electoral margins.

I investigate the extent to which roll call behavior affects the electoral fortunes of incumbents by attempting to combine the best features of the previous approaches. In particular, this analysis includes a much larger number of roll calls than prior studies and I explore their effects individually to understand which, if any, have observable electoral effects. As a result, I expect to be able to offer more comprehensive findings that speak to the frequency of electorally consequential roll calls as well as offer insights into the conditions under which legislative position taking will yield electoral implications.

When and Why Do Roll Calls Matter?

Because legislators cast literally hundreds of votes in a congressional session, one should not expect the vast majority of roll calls to have significant electoral effects. First, as Carson, Finocchiaro, and Rohde (2001) indicate, as much as two-thirds of legislation considered in the House is highly consensual. It is rare for behavior on low variance roll calls to have any noticeable electoral effects since they do little to help voters or special

interest groups distinguish legislators from one another. Moreover, only a fraction of roll calls with variance in legislative behavior may become important enough to play a central role in an election since voters generally tend to be unaware of how their representatives vote on much of the legislation considered in Congress (Kingdon 1989). While voters may recognize the significance of a few important roll calls in Congress each year, they are less likely to learn or recall exactly how their member voted with respect to those bills. In nearly all cases, the public's information about positions taken by legislators is often limited to a few extremely salient issues (Aldrich 1994).

Even with prominent, controversial votes, the experience of the challenger and campaign spending may often overshadow particular positions taken (see Mann and Wolfinger 1980: 629; Jacobson 1987: 139). As Jacobson and Bovitz (1998: 20) contend, if roll call "...decisions reflected only members' personal electoral circumstances, and members sought only to maximize their vote in the next election, then in equilibrium, no roll call vote should have any significant effect on district-level election results. That is, if members simply adapted their votes to their constituents' preferences as accurately as they could, mistakes would cancel out, leaving no systematic effect." Overall, then, the deck is stacked against individual roll calls producing observable election-day effects.

Given the relative obscurity of most House roll calls and the fact that voters are generally unaware of legislators' voting behavior, why then might legislators worry about which positions they take on the House floor? Indeed, chances are that any single roll call will remain outside of the electoral arena. However, studies of legislative behavior suggest that members of Congress are risk averse and worry about the positions they take because they suspect some roll calls *may* become electorally salient (see, e.g., Mayhew

1974a; Jacobson 1987; Arnold 1990), and they can never be absolutely sure about which ones will figure prominently in the next election. Therefore, legislators have significant incentive to make choices as if every roll call could become a factor in their reelection bid—and nearly thirty years of Congress scholarship, since Mayhew (1974a), contends emphatically that they generally act accordingly.

To date, various explanations have been offered to address the hypothesized link between House floor roll call voting and citizens' voting behavior at the polls. In some instances, voter awareness implies a thorough and sophisticated understanding of an incumbent's specific roll call choice; however, there is a second level of awareness that is sufficient to link legislative behavior to electoral outcomes. Indeed, some voters gain a more general sense of awareness of a specific roll call decision. For example, proposed legislation may garner significant attention inside the beltway and this stimulates elite action, which in turn provides voters with some (relatively generic) understanding of their legislators' decisions on hot-button issues. These voters may not necessarily be cognizant of all the details of the vote, but they are at least somewhat familiar with the nature of a *specific* position their legislator has taken on an issue that is salient to them. And this can be sufficient for the roll call—which is the official articulation of the position taken—to have an impact on election day.

Arnold (1990: 46) argues that legislators must be careful when casting roll calls because citizens may use any number of the incumbents' actions when engaging in retrospective voting. Additionally, Wright (1978: 446) claims, "Issues do not need to explain most of the variance in election outcomes; they just need to have enough of an impact to give congressmen—who are surprisingly insecure about their own re-elections

(Fenno, 1977; Mayhew, 1974b)—an incentive to heed the general policy wishes of their constituents.” Moreover, incumbent legislators must develop voting records that prevent challengers from being able to expose inconsistencies in their position taking. As Arnold (1990: 272-273) contends, “the fear is not simply that citizens will notice on their own when a legislator errs, but that challengers will investigate fully a legislator’s voting record and then share their interpretations of how he or she has gone wrong.” Indeed, “...a prominent position on the wrong side of a major issue [can]...galvanize potential opponents” (Jacobson 1987: 139).

Media coverage surrounding prominent votes in Congress suggests that legislators have sufficient reason to worry about their roll calls on these issues being politicized. As suggested above, media coverage of key votes may be all that is necessary to expose “attentive publics” (Arnold 1990: 64-65) to an incumbent’s roll call choices. Thus, those most capable of using legislators’ behavior as a political device—namely, party activists, prospective challengers for House seats, and political elites—have ample opportunities to become aware of key votes and, in turn, transform them into electorally salient political issues (i.e., raise voter awareness). Legislators, then, have every reason to be cautious when taking public positions on such matters, largely because the degree to which votes will become electorally consequential is to some extent beyond their control.

In sum, positions on roll calls can have significant electoral effects not because voters are always aware of legislators’ specific roll call choices but because legislators’ roll call behavior affects the actions of political elites (e.g., the media, special interest groups, and challengers), which, in turn, affects voters’ choices. This conceptualization of the accountability process, involving various potential links between roll call decisions

and voters as well as different levels of voter “awareness,” leads to the prediction that a significant proportion of *key* votes should have observable effects on electoral margins.

What factors impact whether political elites (including the legislators themselves) take sufficient follow-up action for positions on roll calls to have measurable electoral implications? A number of hypothesized factors come to mind. One important factor may be the degree to which legislators in the same party take opposing sides on the issue. With an increase in intra-party defections on a given bill, the degree of controversy may become sufficient to motivate elites to take notice and bring decisions to the attention of a broad set of voters. This may be especially true when defection from the party’s positions results in a more attractive outcome for defectors’ constituents. A related factor in determining the electoral implications of a given roll call position may be the political salience of the legislation under consideration. Many bills considered in Congress are brought to the floor and routinely passed into law with little or no notice paid to them by constituents or interest groups. However, a considerable set of votes relate to highly visible issues that receive widespread attention and are controversial. The relative salience of a roll call should be expected to drive the extent of electoral consequence.

Aside from factors such as the degree of intra-party controversy and saliency, one must also consider the broader political context under which issues are brought up in the House. To a certain degree, whether or not legislation will be viewed by elites or mass voters as controversial or salient will depend upon the political environment and the nature of the issue under consideration. A vote on deficit reduction legislation taken during the late 1980s or early 1990s would be much more salient, for instance, than one taken during the early 1970s.

Data and Methods

To address the question regarding the frequency of electorally consequential roll calls, this analysis goes beyond the case study and policy-specific approaches employed in earlier studies by examining the election-day implications of a relatively large set of roll call votes. In particular, I consider the effects of all *Congressional Quarterly* (CQ) “key votes” from 1973-2000 in the House of Representatives.⁷ Each year since 1945, CQ has selected a series of key votes based on what the editors determine to be the “major” issues of the year. Specifically, an issue is evaluated in terms of whether it involves a degree of controversy, is a matter of political or presidential power, and has the potential to have an enormous impact on the lives of the American people.

My analysis begins with an examination of the 1974 elections since this is the first year in which campaign finance data for individual House elections is available. I focus on CQ’s key votes in order to develop a sense of how often prominent roll call votes that are relatively well known to political elites and voters have observable effects on election day. In so doing, I can begin to paint a fairly complete picture regarding the frequency of electorally consequential roll calls since those votes that do not make the CQ key vote list should be less likely to register on the electoral radar screen.

I examine the electoral effects of legislators’ roll call votes by utilizing the same regression model used by Jacobson (1993).⁸ This model incorporates the usual predictors

⁷ From 1973-2000, CQ classified 435 individual roll calls in the House as “key votes.” The total number of roll calls in this analysis is reduced to 339 for Republicans and 387 for Democrats because I omit all cases (e.g., the Public Debt Limit vote in November of 1985) where there is negligible intra-party variance (i.e., less than 10 defectors from the majority of the party’s viewpoint) in terms of roll call choices. For a more explicit discussion of the rationale for this approach, see Jacobson and Bovitz (1998).

⁸ While Jacobson includes a dummy variable for the legislator’s party affiliation to control for partisan effects, I opted instead to analyze Republican and Democratic legislators separately to account for any behavioral differences attributable to partisan attachments. Since I also include members’ NOMINATE

of congressional election outcomes while adding an additional explanatory variable—namely, legislators’ roll call vote choice on a key vote. The statistical method facilitates empirical estimation of the impact of incumbents’ key vote roll call decisions (the central explanatory variables) on election returns (the dependent variable), while controlling for the effects of other factors that are known to affect House election outcomes. Regression coefficients for each statistically significant roll call, as reported in Table 2, represent the estimated change in the incumbent’s share of the two-party vote that results from a “yea” vote regarding a given key vote considered on the House floor.

The dependent variable is the incumbent’s share of the two-party vote in legislator i ’s district during year t .⁹ The central explanatory variables are the legislator’s choices on key vote roll calls from year t and year $t-1$ (i.e., the roll call votes from the two sessions of Congress preceding the election). In order to isolate the effects of the legislators’ roll call votes on their electoral fortunes, I control for a series of factors that are known to affect incumbent vote share (see, e.g., Jacobson 1993). In particular, the control variables in the model include: the legislator’s previous vote margin, the district’s partisanship measured independently of the congressional vote, incumbent and challenger spending, and challenger quality. In addition, I control for the legislator’s overall voting record in order to isolate the effects of the particular key votes under examination.

In sum, I posit the following model of legislators’ electoral fortunes:

$$\text{INCUMBENT TWO-PARTY VOTE SHARE} = \alpha + \beta_1 \text{Incumbent Vote Share}_{t-1} + \beta_2 \text{District Partisanship} + \beta_3 \ln(\text{Incumbent Spending}) + \beta_4 \ln(\text{Challenger Spending}) + \beta_5 \text{Challenger Quality} + \beta_6 \text{Voting Record} + \beta_7 \text{KEY VOTE} + \epsilon$$

score (as a proxy for their ideology) in the model, this seemed like an acceptable alternative that avoids including both partisan affiliation and member ideology on the right-hand side of the equation.

⁹ Given the general focus on the electoral impact of incumbents’ voting behavior, I exclude open seat contests, incumbents who previously ran and won in a special election, and the few races with non-Democratic/Republican incumbents.

KEY VOTE represents a legislator's decision of whether or not to support a roll call vote considered on the House floor. KEY VOTE is a dummy variable where a position taken on the vote in favor of the roll call is coded 1, 0 otherwise.¹⁰ I test the model with each key roll call separately because, if all key votes are included in a single model, a number of issues (e.g., multicollinearity, listwise deletion) can adversely affect the estimates.¹¹

Incumbent vote share_{t-1} is operationalized as the legislator's share of the two-party vote in the previous election.¹² District Partisanship is measured as the district-level two-party vote share for the presidential candidate from the incumbent representative's party (subtracted from the national vote) in the most recent presidential election (see Brady, Canes-Wrone, and Cogan 2000; Jacobson 2000; Ansolabehere, Snyder, and Stewart 2001). Following Jacobson's (1980) seminal work on money in elections, the model also controls for the effects of incumbent spending and challenger spending. Specifically, I include the natural logarithm of both dollar amounts as separate independent variables in the model (Jacobson 1980: 40).¹³ Challenger Quality is operationalized as a dummy

¹⁰ Abstentions on roll calls votes are treated as missing in the dataset, as are votes that are paired for or against in some of the earlier Congresses. While it would be interesting to examine the observed effects of abstentions more systematically in this analysis, one cannot readily determine whether votes were avoided for strategic reasons or because a member was unable to be present at the time votes were taken.

¹¹ Including all the roll calls from a given congressional session in a single equation makes it nearly impossible to interpret results since legislative voting behavior across roll calls tends to be highly inter-correlated. Additionally, including all the votes in the same model leads to the serious issue of listwise deletion resulting from varying patterns of member abstentions across all key votes. By including only one vote per model, I avoid these estimation problems. More importantly, however, I am in a better position to offer insights regarding the electoral impact of *individual* key votes on members' vote margins. While this analysis is not without potential limitations, I see it as an appropriate first step toward establishing an empirical understanding of when, and under what conditions, roll calls impact electoral fortunes.

¹² For those Congresses following a decennial reapportionment (97th and 102nd) and occasionally when other districts were redrawn (e.g., North Carolina in the 1990s), I attempted to estimate what a member's two-party vote share in the new district would have been in the previous election. To assist with this process, I collected county-level data and attempted to match up former and current district-level data as accurately as possible. In many cases, congressional districts were only slightly redrawn, thereby minimizing obstacles to the analysis.

¹³ As Jacobson argues, the advantage of using the natural logarithm of expenditures for empirical analysis of elections is that doing so avoids the assumption of a linear relationship between money and votes, thereby accounting for diminishing returns from campaign spending.

variable coded 1 if the candidate has previously held elected office, 0 otherwise. This coding also follows Jacobson's classic study that views a successful campaign for another public office as a proxy for candidate quality.¹⁴

For the operationalization of the Voting Record variable, I use Poole-Rosenthal first dimension DW-NOMINATE scores (see, e.g., Poole and Rosenthal 1997; McCarty, Poole, and Rosenthal 1997). These scores, constructed via scaling techniques that use legislators' entire roll call records to measure ideology, provide summary statistics of legislators' overall voting tendencies on the traditional liberal-conservative economic dimension. DW-NOMINATE scores for legislators range from -1 to 1, with low scores indicating policy liberalism and high scores indicating policy conservatism. By including this variable in the model, I seek to control for the legislator's overall ideological reputation and, in turn, isolate the impact of a particular roll call decision that may or may not be consistent with the broader voting record.¹⁵

Results

A summary of the estimated electoral effects of *CQ* key votes for the 1974-2000 House elections are displayed in Table 1 where I report the percentage of key votes that yielded observable electoral effects for incumbent legislators. As summarized in Table 1, a total of 66 out of 339 *CQ* key votes (20%) have a significant impact on Republican

¹⁴ See Jacobson (1980: 106-107; 1990). For a dissenting view, see Green and Krasno (1988: 884-907).

¹⁵ By controlling for members' voting record as reflected by their NOMINATE score, I conduct a relatively stringent test of the electoral impact of *individual* roll calls. Including both the individual-level vote and the NOMINATE score in the model does not necessarily make it more difficult to infer statistical significance since a single roll call represents a fairly negligible component of a member's voting record. In fact, I ran a series of correlation analyses which show that *individual* key votes are almost never strongly correlated with members' NOMINATE scores. Additionally, I re-ran the OLS models for the first part of our analysis without the NOMINATE score and found that the substantive results rarely change in any notable fashion. I nevertheless chose to include legislators' NOMINATE scores because I believe it is theoretically important and it allows me to include some degree of control for the impact of legislators' ideological tendencies.

incumbents' electoral fortunes, while 62 of 387 key votes (16%) yield a statistically significant impact on Democratic legislators' margins. Additionally, Table 2 displays the actual estimates from the 1974-2000 House elections where I report the vote-specific information for each roll call that has a significant impact on incumbent vote share for either Democrats or Republicans (or both).¹⁶ Each coefficient reported in the tables represents the estimated impact of voting "yea" on the corresponding roll call vote.¹⁷

Table 1 - Percentage of CQ House Key Votes With Significant Electoral Impact, 93rd-106th Congresses

Congress	% Of "Key" Roll Calls Significant for Republicans	Total Number of Key Votes During Congress	% Of "Key" Roll Calls Significant for Democrats	Total Number of Key Votes During Congress
93	18.5	27	16.0	25
94	15.4	26	6.5	31
95	4.0	25	18.8	32
96	18.2	22	23.3	30
97	10.7	28	12.9	31
98	7.4	27	12.9	31
99	44.4	27	13.8	29
100	8.0	25	14.8	27
101	48.3	29	22.6	31
102	12.5	24	26.7	30
103	15.8	19	13.3	30
104	22.7	22	15.4	26
105	33.3	21	15.8	19
106	5.9	17	6.7	15
Total	19.5	339	16.0	387

¹⁶ All relevant information concerning bill descriptions, the date the roll call was taken, and the partisan breakdown of the vote was collected from Congressional Quarterly's annual series, *Congressional Roll Call*.

¹⁷ I do not report the coefficient results for the control variables in our model due to space limitations. Overall, the pattern of results for these variables is consistent with extant work on House elections.

Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins

Roll Call	Congress	Date	Party & Vote Result	Coefficient	Robust St. Error
Foreign Military and Economic Aid	93	7/26/73	D 119-94 R 69-89	2.36 2.45*	1.54 1.35
Defense Procurement Authorization	93	7/31/73	D 160-63 R 27-121	-2.60* 1.60	1.57 1.10
Alaskan Pipeline	93	8/2/73	D 133-101 R 65-120	-1.24 5.14**	1.81 1.20
Gerald R. Ford Confirmation	93	12/6/73	D 201-35 R 186-0	-4.66* ---	2.58 ---
National Energy Emergency Act	93	12/14/73	D 78-137 R 102-73	1.71 -2.00*	1.63 1.10
Minimum Wage Increase	93	3/20/74	D 220-11 R 155-26	0.94 -3.41*	4.46 1.98
Elementary and Secondary Education Act Amendments	93	3/26/74	D 145-88 R 148-29	4.37** -0.83	1.82 1.69
Defense Supplemental Authorization, Fiscal 1974	93	4/4/74	D 55-127 R 99-50	2.71* 0.45	1.52 1.17
Public Service Jobs	93	12/12/74	D 203-11 R 119-42	3.32 -3.03**	4.30 1.39
South Vietnam Assistance	94	5/1/75	D 72-200 R 90-46	0.82 -3.67**	1.24 1.35
Executive Level Pay Raises	94	7/30/75	D 178-105 R 36-108	-2.35** -2.58	1.09 1.58
Aid to New York City	94	12/2/75	D 175-103 R 38-100	-0.94 -3.18**	1.55 1.53
Fiscal 1976 Congressional Budget Resolution	94	12/12/75	D 186-61 R 3-126	-2.86* ---	1.50 ---
Defense Department Appropriations, Fiscal 1976	94	1/27/76	D 251-30 R 72-69	-0.43 2.16*	2.22 1.12
Lobbying Disclosure	94	9/28/76	D 54-173 R 94-29	-1.79 -2.90*	1.53 1.62
Stimulus Tax Cuts	95	3/8/77	D 54-218 R 140-1	2.77** ---	1.38 ---

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Party & Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Obey Commission House Reforms	95	10/12/77	D 160-113 R 0-139	-2.46** ---	1.05 ---
National Energy Act	95	10/13/78	D 199-79 R 8-127	-2.03** -1.69	0.92 2.37
Fiscal 1979 Budget Targets	95	5/3/78	D 58-202 R 139-1	3.16** ---	1.21 ---
Labor-HEW Appropriations, Fiscal 1979	95	6/13/78	D 98-163 R 122-18	3.22** -4.01**	1.16 2.03
Full Employment Act	95	3/9/78	D 56-221 R 142-2	4.67** ---	1.20 ---
Energy Mobilization Board	96	11/1/79	D 126-129 R 27-121	3.42** 1.03	1.19 1.28
Nuclear Regulatory Commission	96	11/29/79	D 112-133 R 23-121	2.01* 0.62	1.17 1.39
Panama Canal Treaties Implementation	96	6/20/79	D 195-68 R 25-132	0.14 -3.68**	1.48 1.19
Chrysler Loan Guarantees	96	12/18/79	D 209-48 R 62-88	-2.43** -2.10**	1.08 1.03
Defense Department Authorization	96	5/15/80	D 123-130 R 29-120	3.62** -0.26	1.14 1.33
Draft Registration Funding	96	4/22/80	D 135-122 R 83-66	-2.13* 0.35	1.10 1.04
Labor-HHS-Education Appropriations, Fiscal 1981	96	8/27/80	D 134-124 R 65-91	1.03 2.07*	0.97 1.09
Windfall Profits Tax	96	3/12/80	D 178-85 R 23-130	2.27** 3.79**	1.06 1.60
Michael Myers Expulsion	96	10/2/80	D 225-29 R 151-1	4.65** ---	1.52 ---
Legal Services Corporation	97	6/18/81	D 186-21 R 59-116	-2.44 -2.12*	2.80 1.14
Tax Cuts	97	7/29/81	D 48-194 R 190-1	2.98** ---	1.37 ---

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

Roll Call	Congress	Date	Party & Vote Result	Coefficient	Robust St. Error
Urgent Supplemental Appropriations, Fiscal 1982	97	5/12/82	D 215-15 R 128-52	4.38* 0.62	2.64 1.16
Budget Reconciliation Tax Increases/Spending Cuts	97	7/28/82	D 164-60 R 44-137	0.12 3.92**	1.17 1.18
Soviet Economic Sanctions	97	9/29/82	D 82-146 R 124-57	-2.03* 0.41	1.09 1.14
Continuing Appropriations, Fiscal 1983/Jobs	97	12/14/82	D 20-208 R 171-7	7.07** 0.90	3.18 2.51
Automobile Domestic Content Requirements	97	12/15/82	D 171-58 R 44-130	2.15 -2.63**	1.27 1.14
Emergency Housing Assistance Act	98	5/11/83	D 210-41 R 6-155	-2.89* -1.70	1.50 1.99
Department of Housing and Urban Development Approp.	98	6/2/83	D 138-86 R 89-50	1.73* -0.44	0.91 1.05
Defense Department Appropriations, Fiscal 1984	98	11/1/83	D 190-72 R 18-145	-0.32 2.53**	1.24 1.13
Defense Department Appropriations, Fiscal 1984	98	11/15/83	D 198-63 R 60-103	2.68** -0.80	1.10 0.90
Tax Reform Act	98	11/17/83	D 191-65 R 13-149	-0.85 3.54**	1.08 1.07
Equal Access Act	98	5/15/84	D 123-134 R 147-17	-1.77* -0.62	1.03 1.26
Supplemental Appropriations, Fiscal 1985	99	6/6/85	D 95-133 R 108-69	-0.01 2.15**	0.89 0.82
Department of Defense Authorization, Fiscal 1986	99	6/19/85	D 86-162 R 143-34	-0.87 -2.59**	1.11 1.12
Farm Programs Reauthor., Fiscal 1986-90	99	10/3/85	D 82-164 R 169-10	1.82* 3.39**	0.96 0.89
Plant Closing Notification	99	11/21/85	D 183-54 R 20-154	-2.33* 2.52*	1.30 1.37
Superfund Reauthorization, Fiscal 1986-90	99	12/10/85	D 147-101 R 73-105	2.98** 0.80	0.92 0.89

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

Roll Call	Congress	Date	Party & Vote Result	Coefficient	Robust St. Error
Tax Overhaul	99	12/11/85	D 188-59 R 14-164	-1.44 -2.92**	1.01 1.37
Omnibus Highway Bill	99	8/6/86	D 81-161 R 117-57	-0.45 -2.59**	0.94 0.97
Defense Authorization, Fiscal 1987	99	8/8/86	D 208-26 R 37-130	-0.09 2.40**	1.73 1.13
Defense Authorization, Fiscal 1987	99	8/8/86	D 200-31 R 34-124	-0.22 2.73**	1.74 1.02
Defense Authorization, Fiscal 1987	99	8/12/86	D 206-34 R 33-142	-0.06 2.13**	1.67 0.98
Defense Authorization, Fiscal 1987	99	8/13/86	D 172-72 R 38-137	0.80 1.62*	1.21 0.98
Pesticide Control Reauthorization	99	9/19/86	D 135-65 R 22-118	-0.45 3.14**	1.24 1.26
Tax Overhaul	99	9/25/86	D 176-74 R 116-62	-1.56* 1.29	0.92 0.89
South African Sanctions	99	9/29/86	D 232-4 R 81-79	--- 2.57**	--- 1.06
Speed Limit/Omnibus Highway Reauthorization	100	3/18/87	D 92-156 R 125-50	2.29** -1.52*	0.97 0.87
FSLIC Rescue	100	5/5/87	D 81-160 R 72-98	-2.77** -0.88	0.97 0.78
Coast Guard Authorization/ Re-flagging Kuwaiti Ships	100	7/8/87	D 200-38 R 22-146	-1.87 3.01**	1.50 1.00
Fiscal 1988 Transportation Approp./In-Flight Smoking	100	7/13/87	D 124-102 R 74-91	1.86** -0.44	0.86 0.81
Fiscal 1988 Budget Reconciliation	100	10/29/87	D 205-41 R 1-164	-1.82* ---	1.08 ---
Fiscal 1990 Budget Resolution/ Adoption	101	5/4/89	D 157-96 R 106-61	-0.22 -3.00**	1.01 1.22
Minimum-Wage Increase/Veto Override	101	6/14/89	D 227-28 R 20-150	-3.55* 6.92**	1.96 1.88

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Party & Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Fiscal 1990-91 Defense Department Auth./SDI Funding	101	7/25/89	D 214-38 R 34-137	-0.50 3.39*	1.75 1.74
Fiscal 1990-91 Defense Department Auth./'Stealth'	101	7/26/89	D 116-135 R 28-144	1.27 3.73**	1.18 1.86
Fiscal 1990 Budget Reconc./ Childcare Substitute	101	10/5/89	D 36-214 R 159-16	4.24** -4.58*	1.86 2.62
Fiscal 1990 Labor, HHS and Education Approp./Abortion	101	10/11/89	D 175-72 R 41-134	2.49* 1.66	1.30 1.35
Oil-Spill Liability/State Pre-emption	101	11/8/89	D 204-44 R 75-99	-1.67 2.77**	1.67 1.09
Government Pay-and-Ethics Package/Passage	101	11/16/89	D 168-85 R 84-89	-3.54** -0.55	0.98 1.26
Fiscal 1990 Foreign Aid Supplemental Authorizations	101	5/22/90	D 219-28 R 31-135	-1.45 3.54*	1.99 1.81
Clean Air Act Reauthorization/ Transition Aid	101	5/23/90	D 231-20 R 43-126	-0.77 2.65**	2.80 1.32
Family and Medical Leave Act/Veto Override	101	7/25/90	D 194-57 R 38-138	-2.96* 3.05*	1.51 1.79
Frank Reprimand/Censure	101	7/26/90	D 12-241 R 129-46	3.55 3.51**	2.74 1.55
Fiscal 1991 Defense Authorization/ SDI Funding	101	9/18/90	D 205-39 R 20-150	-2.09 3.65*	1.84 2.07
Legal Immigration Revision/Passage	101	10/3/90	D 186-65 R 45-127	-2.57* 0.13	1.32 1.44
Fiscal 1991 Budget Resolution/ Conference Report	101	10/4/90	D 108-149 R 71-105	-0.75 -2.41*	1.14 1.40
Civil Rights Act of 1990/Conference Report	101	10/17/90	D 239-15 R 34-139	-3.28 4.77**	2.27 1.58
Fiscal 1991 Intelligence Appropriations/Aid to UNITA	101	10/17/90	D 195-50 R 12-156	-2.75* 4.73*	1.56 2.59
Civil Rights Act of 1991/ Passage	102	6/5/91	D 250-15 R 22-143	5.75** 1.30	1.93 1.72

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Party & Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Fiscal 1992 Interior Appropriations/ Grazing Fees	102	6/25/91	D 184-78 R 47-114	-3.45** 0.14	1.27 1.35
Fiscal 1992-93 Foreign Aid Authoriz./Conference Report	102	10/30/91	D 131-127 R 28-134	1.08 3.92**	1.28 1.58
Fiscal 1992 Labor, HHS, and Education Approp./Passage	102	11/19/91	D 222-43 R 53-113	4.05** 0.74	1.88 1.39
Campaign Finance/Passage	102	11/25/91	D 251-12 R 21-144	-3.80** 0.28	1.28 1.95
1992 Tax Bill/Democratic Substitute	102	2/27/92	D 219-46 R 1-164	-2.29* -0.72	1.23 5.42
Campaign Finance Reform/ Conference Report	102	4/9/92	D 239-20 R 19-145	-2.77 4.99*	2.97 2.60
Family Planning Reauthorization/ Passage	102	4/30/92	D 212-45 R 55-105	4.10** 1.28	1.73 1.32
Fiscal 1993 Defense Authoriz./ Strategic Defense Initiative	102	6/5/92	D 149-77 R 11-134	-2.83** 1.91	1.33 2.74
Cable Television Reregulation/ Program Access	102	7/23/92	D 221-23 R 116-45	-2.34* -0.15	1.19 1.31
Western Water Bill/Central Valley Project	102	10/6/92	D 42-202 R 117-41	0.53 -3.20**	1.90 1.27
Fiscal 1994 Budget Resolution/ Adoption	103	3/18/93	D 242-11 R 0-172	-3.35* ---	1.86 ---
Fiscal 1994 Defense Authorization/ Gay Ban	103	9/28/93	D 157-101 R 11-163	0.02 -3.03*	1.08 1.75
NAFTA Implementation/Passage	103	11/17/93	D 102-156 R 132-43	-2.31** -0.90	0.70 0.93
Mining Law Overhaul/Passage	103	11/18/93	D 245-6 R 70-102	-0.53 -2.56**	2.70 1.05
Abortion Clinic Access/Conference Report	103	5/5/94	D 200-43 R 40-131	-1.89* -0.84	1.00 1.10
Fiscal 1995 Defense Authoriz./ Bosnia Arms Embargo Term.	103	6/9/94	D 117-132 R 127-45	1.36** -0.15	0.68 1.00

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

Roll Call	Congress	Date	Party & Vote Result	Coefficient	Robust St. Error
California Desert Protection/Hunting Exception	103	7/12/94	D 92-157 R 146-26	-0.19 2.56*	0.98 1.47
Clean Water Act Revisions/Passage	104	5/16/95	D 45-150 R 195-34	-2.52** -1.88**	1.11 0.78
1995 Budget- Reconciliation/Passage	104	10/26/95	D 4-192 R 223-10	--- -2.14**	--- 1.00
Gift Rules/Full Disclosure Alternative	104	11/16/95	D 46-150 R 108-125	-2.69** 1.21	0.96 0.64
Fiscal 1996 Defense Authorization/ Veto Override	104	1/3/96	D 34-139 R 206-16	-1.37 -1.66**	1.27 0.82
Farm Bill/Passage	104	2/29/96	D 54-135 R 216-19	-0.26 -1.45*	1.04 0.88
Anti-Terrorism and Death Penalty Enforcement Authority	104	3/13/96	D 67-117 R 178-54	-1.70 1.44*	1.01 0.74
Anti-Terrorism & Death Penalty Enforcement/Habeas Corpus	104	3/14/96	D 122-65 R 12-218	2.56** -0.21	1.02 1.26
Fiscal 1997 Omnibus Approp./Conference Report	104	9/28/96	D 167-13 R 202-24	-3.66** -0.14	1.34 1.14
Reprimand of Rep. Newt Gingrich	105	1/21/97	D 198-2 R 196-26	--- 1.94*	--- 0.98
Public Housing System Overhaul	105	5/14/97	D 71-130 R 222-1	1.77* ---	1.05 ---
Fiscal 1998 Budget Resolution	105	5/21/97	D 155-48 R 58-168	-1.91** 1.36	0.83 0.93
Fiscal 1998 Budget Resolution	105	5/21/97	D 132-72 R 201-26	-1.96** 0.44	0.87 0.88
Fiscal 1998 Foreign Operations Appropriations/Abortion Funds	105	9/4/97	D 171-33 R 38-185	-0.58 -3.67**	1.43 1.20
Private School Vouchers	105	11/4/97	D 4-192 R 187-35	--- -3.09**	--- 1.16
Special Transportation Projects	105	4/1/98	D 12-184 R 67-152	0.13 -2.02**	1.64 0.72

**Table 2 – Key Votes Yielding Significant Electoral Effects on Incumbent Margins
(cont.)**

Financial Services Overhaul	105	5/13/98	D 61-139 R 153-73	0.63 -2.19**	0.76 0.74
Food Stamps for Legal Immigrants	105	5/22/98	D 2-190 R 118-98	--- -1.80**	--- 0.77
Contraceptive Coverage	105	7/16/98	D 175-21 R 48-177	-1.91 -3.53**	1.53 1.10
Physician-Assisted Suicide	106	10/27/99	D 71-135 R 200-20	1.60* 0.82	0.83 1.01
Campaign Finance Disclosure	106	6/28/00	D 205-0 R 178-39	--- 1.83**	--- 0.78

**p ≤ .05, *p ≤ .10

A cursory glance at the results in Table 2 reveals a number of notable findings. First, there is considerable variation in the types of issues yielding observable electoral consequences. In particular, one can detect significant electoral effects on roll calls dealing with budget and tax policy, foreign policy and national defense, environmental, transportation, civil rights, and social issues. This is an especially interesting result as it suggests that the relative influence of “attentive publics” (e.g., interest groups and political elites) in the election is not limited to a narrow category of issue areas.

I also observe that many of the votes in Table 2 are significant in both a statistical and substantive sense. While some of the votes appear to have a minimal effect on incumbents vote margins in the subsequent elections, many other roll calls exert what is considered to be a sizeable impact on vote share, especially in light of the other factors being controlled for in the model (e.g., campaign spending, challenger quality). Indeed, some roll calls appear to impact legislators’ electoral margins by as many as six or seven

percentage points on average. Consider, for instance, the electoral impact of voting “yea” on the veto override for the bill to increase the minimum wage (6/14/89). The 20 Republicans who voted in favor of this override received two-party votes shares that were on average approximately 7 percent higher than other Republican incumbents in the 1990 House elections (assuming all else equal).¹⁸

The results displayed in Table 2 also reveal considerable variation across House elections in terms of the number of key votes yielding significant electoral effects. While we observe as many as 14 and 17 key votes yielding significant electoral effects in the 1986 and 1990 House elections respectively, other election years (e.g., 2000) have as few as 2 key votes prove to be electorally consequential. (The average number of significant roll calls between 1974 and 2000 is 8.) This suggests (although it is not directly tested) that the political context under which a vote occurs in the House may play an important role in determining whether or not the vote will produce observable electoral effects.¹⁹

¹⁸ Why did these 20 Republicans benefit so much from their position-taking on the Minimum Wage Increase veto override? There are at least two key reasons. First, the override vote was very high profile, including national news coverage (e.g., in the New York Times) as well as highly publicized reactions to the vote by some of the most powerful special interest groups in America (e.g., the AFL-CIO) who have a direct line of communication to large constituencies. These conditions facilitated voter awareness of the issue—and, of representatives’ positions. Second, the Republicans who defected from the party to vote against the president’s veto came from districts where they had a significant opportunity to benefit electorally as a result. These Republicans hailed from relatively moderate districts (as compared with other Republican incumbents), where the minimum wage increase proposal was more popular. Indeed, these 20 Republicans—many of whom were Northeasterners—generally had a relatively strong Democratic presence in their districts (based on presidential vote shares, which is a frequently used measure of district partisanship). In these 20 districts, the 1988 Democratic presidential candidate (Dukakis) received, on average, 45 percent of the vote (range: 42-57 percent). In contrast, nearly all of the 150 Republicans who voted against the veto override came from districts where Bush generally received relatively large shares of the district-level presidential vote. As I discuss later in the paper, the pattern of electoral significance of roll calls suggests that strategic party defections in favor of specialized district preferences can often be rewarded.

¹⁹ Since the possibility exists that some of the significant findings in the regression models could be due to “false positives” resulting from similar alignments of voting coalitions among members, it is important to address this issue briefly. As it now stands, the positions that legislators take on a specific key vote could appear electorally consequential (even though they actually may not be) simply because the same members that voted together on a previously significant vote also did so on a subsequent vote. Nonetheless, I do not believe that this potential issue undermines the reported findings for two main reasons. First, from a purely

The degree of attention given to a particular vote by attentive publics, the media, special interest groups, or experienced challengers may influence the likelihood that incumbents' roll call decisions will be revisited during a subsequent election campaign.

Given the sizable percentage of electorally significant votes for the Republicans and Democrats (20% and 16% respectively) from 1973-2000, it appears that more than chance is at work when we observe some key roll calls—and not others—having a significant electoral effect. This, of course, raises one additional question. How can one systematically explain the significant effects of some roll calls and not others, especially given the large volume of roll calls legislators consider in one year and given citizens' general lack of awareness of legislators' decisions? It is to this question that I now turn.

Explaining Variation in the Electoral Significance of Key Roll Calls

Many of the roll call votes under investigation yielded no observable significant effect on electoral outcomes. This is not surprising given that legislators cast hundreds of roll call votes every session of Congress and only a fraction of those votes can become large enough issues to play a role in the election. However, a sizable number of key roll calls from 1973-2000 were controversial, became political issues and, according to the earlier results, appear to have had significant effects on congressional elections.

Given that some roll calls have observable electoral consequences and others do not, a theoretical explanation is needed to explain why certain roll calls emerge from the

theoretical perspective, there is little reason to suspect that the same coalitions of legislators routinely join together and vote the same way *except* in those circumstances when their positions are likely to set them apart electorally from other members. Second, a related analysis (results not shown) that combined legislators' voting patterns across all key votes in a party unity score (to reflect the proportion of times members voted with a majority of their party) revealed considerable variability in significance both across legislators and over time, thus appearing to minimize the likelihood of false positives.

vast number of House floor votes to influence elections. Toward that end, I draw on the regression analysis presented in the previous section to test empirically what drives roll calls' electoral effects (or lack thereof). How does this analysis move us down the path toward a theoretical framework for the *conditions* under which roll calls are electorally consequential? The results of the previous section provide data on which votes are—and which votes are not—significant. Using these data as the dependent variable, I can test a model designed to predict whether votes will have electoral implications and then use the results to inform more comprehensive theory development.

The results of the analysis summarized in Table 2 provide 435 observations of roll calls that either do or do not have observable electoral effects for Democrats and/or Republicans.²⁰ These observations provide the dependent variable—*Roll Call Electoral Significance*—for this aspect of the analysis. This variable is coded 1 if the vote on the roll call has a significant electoral effect according to the regressions presented earlier, and 0 otherwise. Since Roll Call Electoral Significance is a binary variable, I utilize probit to estimate the model, which can accommodate the complexities of estimating a model with a limited dependent variable.

What causes a roll call to have observable electoral implications? Drawing on the earlier theoretical discussion, many factors come to mind. For example, a large number of intra-party defections on a roll call vote may instigate electoral relevance. As the proportion of defections within the party increases, political elites may take notice of this level of disagreement and draw it to the attention of the voters (especially if it results in a more favorable outcome for a representatives' constituents). Alternatively, if a roll call

²⁰ Roll calls where there is negligible intra-party variation were coded as not electorally significant in this model. The results reported in Table 3 do not differ substantively when these votes are excluded from the model.

vote is a major news story (e.g., it makes the front page of the *New York Times*), then it may have strong political salience and, in turn, affect elections. Yet another possible factor is the roll call vote's particular issue area, since some may seep into the electoral arena more regularly than others. A final consideration is that electoral effects may hinge on whether there was consensus surrounding a roll call (e.g., a vote result of 425-10) vs. being conflictual (e.g., 218-217). All of these factors are incorporated into the model as independent variables.

Since I pool data from across elections, it is important to control for fixed effects (see Kennedy 1998: 226-228). Thus, I include dummy variables for all but the 93rd Congress as independent variables to control for the possibility that certain congresses may produce more electorally consequential roll calls than others. I also control for whether or not a particular roll call took place during a congressional election year. By doing this, I account for the possibility that roll calls cast during election years are better positioned to have electoral implications due to their proximity to the upcoming election.

In sum, I posit the following model to explain whether a roll call is electorally significant or not:

$$\text{Pr(Roll Call Electoral Significance)} = \alpha + \beta_1 \text{Election Year} + \beta_2 \text{Party Defections} + \beta_3 \text{Conflict Level} + \beta_4 \text{NYTimes} + \beta_5 \text{Appropriations Vote} + \beta_6 \text{Defense Vote} + \beta_7 \text{Welfare Vote} + \beta_8 \text{Congress-Specific Dummies} + \epsilon$$

As before, I run the model separately for Democrats and Republicans since some factors may determine whether or not a roll call is electorally consequential for one party's incumbents while having no effect on the other party's reelection-seeking legislators. Each variable in the model is measured as follows.

Election year is a dummy variable coded 1 for an election year, 0 otherwise. Party Defections is coded as the proportion of a party's incumbents who voted with the other party on the key vote. Conflict Level is measured as the proportion of members dissenting from the majority view on the roll call. NYTimes is a dummy variable indicating whether or not the key vote was a front-page story in the *New York Times* immediately following the vote in the House (thus, tapping a measure of saliency for the vote). The issue codes (e.g., appropriations, defense, and welfare votes) are dummy variables taken from Rohde's (2003) roll call database for the House of Representatives that spans from 1953-2000. Finally, I include a dummy variable for each Congress (except for the 93rd).

The results of the model for Democrats and Republicans are presented in Table 3.²¹ The probit estimates indicate that, for both parties, the level of conflict has a significant positive effect on whether a roll call will be electorally significant. The estimates suggest that the higher the level of conflict on a particular roll call, the higher the probability that a roll call vote will be electorally consequential. I find this result to be particularly appealing and quite informative as it suggests that the more embattled Congress is over a particular key roll call, the more likely the roll call is to help voters distinguish among candidates and then cast votes accordingly. This conclusion is quite intuitive, providing a straightforward explanatory factor that can be used to build a more comprehensive theory and to make predictions regarding whether or not positions taken on an alleged "key" vote will actually be critical come election time.

²¹ As is common in the literature that presents similar analyses with time-period controls, I do not report the coefficients and standard errors of the Congress-specific dummy variables in Table 3.

Table 3 – Probit Model of Electorally Significant House Roll Call Votes

Variable	Democrats	Δ P	Republicans	Δ P
Election Year	-0.156 (0.152)		0.133 (0.162)	
Party Defections	0.869 (0.622)		1.556** (0.564)	.03
Level of Conflict	0.788** (0.400)	.03	1.574** (0.458)	.07
NY Times Front-Page Story	0.425** (0.159)	.09	0.346** (0.172)	.05
Appropriations Vote	-0.040 (0.223)		-0.249 (0.256)	
Defense Vote	-0.107 (0.261)		0.478* (0.248)	.09
Welfare Vote	-0.020 (0.285)		0.084 (0.325)	
Constant	-2.226** (0.439)		-3.012** (0.564)	
Pseudo R²	0.080		0.179	
Log-Likelihood	32.97		59.51	
% Correctly Predicted	85.75		85.98	
Reduction of Error	26.25		53.48	
Sample Size (N)	435		435	

Note: the coefficients are probit estimates; the dependent variable is 1 if the roll call vote is electorally significant according to our analysis, 0 otherwise; **p ≤ .05, *p ≤ .10

The change in predicted probability (Δ P) is calculated from a baseline model using Tomz, Wittenberg, and King's (1999) CLARIFY program where interval-level variables are held at their mean and dichotomous variables are held at their modal value. For interval-level variables, changes reflect an increase of one standard deviation. For dichotomous variables, the values reported reflect changes from one category to the other. For more information about the CLARIFY program, see King, Tomz, and Wittenberg (2000).

The substantive effect of the covariate(s) can be illustrated by calculating the change in predicted probability of a roll call yielding electoral effects as the explanatory variable of interest increases one standard deviation (or moves from zero to one) while

holding all other variables at their mean or modal values. These estimates are displayed in the table (ΔP) for the explanatory variables yielding significant effects. For instance, roll calls with higher levels of conflict were 3 percent more likely to result in electoral consequences among Democrats. Among Republicans, higher levels of conflict on roll calls dramatically increased the likelihood of observable electoral consequences by as much as 7 percent.

Additionally, the results support my theoretical expectation that roll calls with high levels of salience as measured by their appearance on the front page of the *New York Times* are significantly more likely to yield observable electoral consequences. Among Democrats, roll call votes that made the front page of the *Times* were 9 percent more likely to result in observable effects. While the effect among Republicans was smaller, votes appearing on the front page of the *Times* still increased the probability of electorally significant effects by as much as 5 percent. This finding is noteworthy as it suggests that when voters are better informed about highly salient votes in the House, they are more likely to reward or punish their representative for their position taking behavior.

Aside from these main results, I also find that two additional factors appear to play a significant role in determining whether or not a roll call has electoral effects *for Republicans only*. First, I observe that the number of party defections on roll call votes among Republicans had a significant and positive impact on those roll calls becoming electorally consequential. While the variable for party defections among Democrats was also in a positive direction, it failed to reach conventional levels of statistical significance ($p < .162$). One possible explanation for this result is that Republicans in relatively moderate districts may occasionally be rewarded for joining with Democrats on votes in

certain key policy areas, while the same cannot be said for Democrats who defect to vote with Republicans.

I also find that roll calls on national defense issues were significantly more likely than other types of votes to produce observable electoral consequences ($p < .065$) for Republican incumbents. This is also an intuitive result, since defense is generally a Republican issue and therefore we might expect GOP incumbents to be held accountable by constituents for legislative decisions in this policy area (on this point, see Abramson, Aldrich, and Rohde 2003). Indeed, the predicted probabilities indicate that roll call votes on defense issues were 9 percent more likely to yield observable electoral consequences among Republicans.

In sum, this second part of the analysis offers important evidence that can be used to build a more comprehensive theory of the conditions under which roll call votes on the House floor will transcend intra-chamber politics and become important political issues in congressional election races. Indeed, I now have some clear evidence suggesting that both the level of conflict and salience of the roll call vote impacts its electoral relevance for both Democrats and Republicans. Moreover, one can observe that the rate of intra-party defections and the particular issue area of a given roll call vote impacts whether or not it would produce observable electoral consequences among Republicans. Thus, these results have illustrated a number of potential determinants of electorally significant roll calls.

Additional empirical work is necessary to provide more intuition regarding the dynamic in question, so that reasonable assumptions can be made in the theory-building process. Moreover, while this approach has broadened the scope of analysis regarding

when roll calls relate to elections, it is important to return to the case study methodology as a complement in order to gain insights as to why some roll calls and not others are electorally consequential. By developing a more complete understanding of why some roll calls and not others have observable electoral effects, I hope to be able to add critical nuances to how we think about Mayhew's seminal position-taking argument.

Understanding Directionality Of Roll Call Significance

Although it is beyond the scope of the research presented here, I wish to comment at least briefly on the issue of directionality of the roll call effects. In particular, what are some of the key insights related to the signs of the coefficients in the main analysis investigating the frequency of electorally significant roll calls? Are members regularly rewarded or punished for loyalty (or lack thereof) to their party?

The direction of electoral significance can go in one of two ways: either in favor of intra-party loyalists or in favor of intra-party defectors. One hypothesis regarding directionality is that intra-party defectors (rather than the loyalists) should generally be the ones who are rewarded at the polls due to significant roll calls. The logic behind this hypothesis is that votes against the party's position on key roll calls must be highly strategic decisions by incumbents who anticipate special reward from constituents for putting the district first on important issues where the party position and the district-need are disparate. This of course does not suggest that incumbents should regularly defect from their party in anticipation of reward—after all, constituents presumably want and expect a relatively high degree of party loyalty, since the party is a key reason why most supported the candidate in the first place. Rather, the hypothesis suggests that most

defections on important roll calls are highly strategic, presumably motivated at least in part by notable constituency-demand; and therefore they garner special attention from elites and voters.

When significant votes occur, do they generally reward strategic intra-party defections as hypothesized? A review of the evidence presented in Table 2 suggests that most significant roll calls are in fact cases where intra-party defection is being rewarded. Indeed, for both Democrats and Republicans, more than two-thirds (68%) of the electorally significant votes are cases of intra-party defectors receiving higher average two-party vote shares than loyalists, all else equal. This is an important finding as it strongly suggests that roll call votes are usually significant because party defectors are rewarded for taking strategic positions against the party's point of view.

What might explain the remaining 32% of roll calls yielding a significant positive impact of party loyalty? One hypothesis is that party loyalists are sometimes rewarded for sticking with the party when a core party issue is facing a relatively large number of intra-party defections. The results provide some initial evidence to support this assertion (although I think more detailed investigation of this complicated question—including case-study analysis—is required). For both Democrats and Republicans, the median percentage of intra-party defections is higher for roll calls that have a positive impact on *loyalists*, as compared with the median percentage of intra-party defectors for roll calls that have a positive impact on *defectors*.²² This suggests that when there is a relatively large degree of intra-party defection, the electoral impact often is not a reward for

²² The median percentage of intra-party defectors for roll calls that have a positive impact on Democratic loyalists is 32%, as compared with 24% for roll calls that have a positive impact on Democratic defectors. The median percentage of intra-party defectors for roll calls that have a positive impact on Republican loyalists is 25%, as compared with 19% for roll calls that have a positive impact on Republican defectors.

defectors but rather a reward for loyalists who provide the counterbalancing force that is working to sustain the party's position on an issue that is important to the party's agenda.

Many other questions relate to the directionality of the effects uncovered here. For example, do defections in some policy areas tend to bring electoral rewards while defections in other areas tend to generate losses at the polls? Do directionality patterns change over time due to various circumstances? Answering these types of questions in future research can help us move beyond identifying the frequency and conditions of electorally significant rolls calls to a more thorough understanding of how electorally consequential roll calls affect incumbents' reelection bids.

Conclusion

The analysis in this paper has been motivated by two central questions pertaining to the connection between legislative position taking behavior and electoral fortunes. First, I sought to determine whether positions expressed by incumbent legislators on key votes yielded observable electoral effects. Second, I attempted to better understand why some votes, and not others, produced such effects. In both instances, I found evidence to support my expectations. In particular, the results strongly support the contention that a wide range of prominent roll call votes have electoral implications for incumbent House members. The analysis also enables one to begin to identify the conditions (e.g., the level of conflict and salience of the roll call vote) under which position-taking behavior has electoral implications.

By developing an understanding of the theoretical relationship between roll calls and elections, we can enhance our capacity to assess how democratic accountability

manifests itself in the American political process. In particular, we can identify precisely how, when, and why legislators are rewarded or punished for position taking. Moreover, by specifying electoral implications of roll calls, we can gain insight into the underlying logic of legislative behavior (see, e.g., Mayhew 1974a: 67-69; Fiorina 1974; Kingdon 1989; Arnold 1990). Indeed, if incumbents' roll call choices are driven in part by whether they anticipate electoral effects, then a comprehensive view of how legislators formulate these expectations can help us predict when they will be conservative in their roll call decisions (e.g., vote like they always have or based on what the party wants) versus when they will engage in "entrepreneurial position taking" (Mayhew 1974a: 68).

CHAPTER 3

ELECTORAL ACCOUNTABILITY AND ROLL CALL VOTING IN THE U.S. SENATE

To what extent are members of Congress held accountable for the positions they express on roll call votes? Despite varying degrees of attention to this important issue in the scholarly literature (see, e.g., Stokes and Miller 1962; Erikson 1971b; Wright 1978; Mann and Wolfinger 1980; Kingdon 1989; Jacobson 1993), this remains a persistent and largely unanswered question for students of legislative behavior. While it is clear that legislators behave strategically when expressing public positions on roll call votes, it is less clear what effects such position-taking behavior has on legislators' electoral fortunes. As a result, it is now fairly common for scholars to conclude that roll call voting has little or no observable electoral consequences for legislators, especially since we rarely see incumbents in the contemporary era get defeated.

In thinking about the potential impact of roll call voting on electoral fortunes, the extant literature exploring this relationship has largely been characterized by two alternative empirical approaches. The first approach focuses exclusively on aggregate voting patterns in Congress to determine the extent to which ideological extremeness on all or a subset of roll calls produces observable electoral effects (see, e.g., Erikson 1971b; Burnham 1975; Wright 1978; Erikson and Wright 2000, 2001; Ansolabehere, Snyder, and Stewart 2001). The more extreme legislators are perceived to be in their overall voting behavior when compared with their constituencies, the greater impact this extremeness should have on their vote margins in subsequent elections, all else being equal.

A more recent and alternative empirical approach has focused exclusively on the electoral effects of a single vote or certain types of votes in Congress. Studies of this nature have sought to explore whether the positions legislators express on individual roll call votes significantly affect the size of the vote margin by which they are reelected or defeated (see, e.g., Jacobson 1993; Bianco, Spence, and Wilkerson 1996; Jacobson and Bovitz 1998). Scholars following this approach assume that controversial positions taken on highly visible or salient roll call votes in Congress (i.e., those dealing with budgetary or fiscal issues) have a significant and measurable impact on the percentage of the vote incumbent legislators receive.

While the extant literature offers us some preliminary insights concerning the relationship between legislative behavior and election outcomes, shortcomings with these approaches limit our understanding of how roll call voting impacts electoral fortunes. In particular, studies that rely on aggregate measures of legislative behavior or ideology miss important individual effects since they are unable to distinguish the electoral effect of one vote from another. Because all or even a subset of votes are combined together, it becomes impossible to evaluate which specific votes, if any, are producing significant effects at the margins for incumbents. At the other extreme, analyses examining the electoral consequences of one or even a few votes in Congress can at best be described as case studies from which it is difficult to generalize. More importantly, these latter studies offer us little or no predictive power concerning whether or not other votes will yield significant electoral effects since they are not taken into account in existing models.

One solution for overcoming these problems in an attempt to more systematically evaluate the extent to which roll call behavior affects the percentage of the vote received

by incumbents involves combining the best features of the previous two approaches. In fact, recent work by Bovitz and Carson (2000) and Carson (2003) has done just this in the context of House elections. In particular, their analyses include a much larger number of roll calls than previous studies and they explore their effects individually to understand which, if any, have observable electoral effects. By doing this, they have sought to offer a more comprehensive account that speaks to the frequency of electorally consequential roll calls and offers insights into the conditions under which legislative position taking has electoral implications.

Despite the different approaches adopted in the literature examining the linkage between position taking on roll call votes and electoral outcomes, previous analyses share one common factor: each focuses exclusively on the House of Representatives. As such, we know considerably less about the electoral consequences of roll call voting behavior in the U.S. Senate. In this chapter, I move beyond the House-centric approaches adopted in previous scholarship to more systematically examine the representational connection between substantive positions on roll calls and electoral fortunes in the context of Senate elections. Building upon and extending previous work focusing exclusively on the House, I examine the electoral implications of hundreds of “key” roll call votes in the Senate from the early 1970s to the present. From this, I hope to present new insights regarding the observable electoral effects of roll call voting in the Senate as well as offer comparative differences between House and Senate elections.

The organization of this chapter proceeds as follows. I briefly review the findings from Bovitz and Carson (2000) and Carson (2003) before turning to a general discussion on the U.S. Senate. From there, I discuss the data and methodology utilized and present

results detailing the frequency of electorally consequential roll call votes in the Senate. Based on these results, I offer a comparative assessment of the differences in electoral consequences of roll call voting for the House and Senate. Next, I examine why some roll calls, and not others, have observable electoral effects. I conclude by discussing the implications of the results and explore possible avenues for future research.

Prior Findings

Bovitz and Carson (2000) and Carson (2003) explore the electoral consequences of position taking on roll call votes in the context of House elections. Using “key votes” as classified by Congressional Quarterly across multiple congresses,²³ they examine the extent to which positions expressed on a relatively large set of highly visible and salient roll call votes yield observable electoral effects at the margins for House incumbents. They focus on key votes in their analyses to assess the extent to which prominent roll call votes that are reasonably well known to both political elites and constituents will have observable effects on election day. Although the authors do not claim that key votes represent the only subset of roll calls that can produce observable electoral effects, they do suggest that these votes offer a useful starting point for an analysis of electoral accountability and roll call voting.

Bovitz and Carson (2000) and Carson (2003) find that a wide range of roll call votes in the House produce observable effects at the margins. More specifically, they find considerable variation in the types of issues yielding discernible electoral effects for

²³ Each year since 1945, Congressional Quarterly has selected a series of key votes based on what the CQ editors determine to be the “major” issues of the year. In particular, issues are evaluated in terms of whether they involve a substantial degree of controversy, are a matter of political or presidential power, or have the potential to have an enormous impact on the lives of the American people.

incumbent legislators. For instance, they find that not only do budget and appropriations votes yield observable electoral effects, but that many other issues such as environmental and foreign policy, transportation, civil rights, and social issues do as well. Indeed, their results suggest that many votes on these types of issue areas have both a strong statistical and substantive effect on members' electoral margins.

Building upon their preliminary results, Bovitz and Carson (2000) and Carson (2003) also seek to understand why certain roll calls, and not others, yield observable electoral effects. Toward this end, they draw upon the findings in their initial analyses to test empirically whether certain vote-specific factors influence the likelihood of a roll call vote yielding electoral consequences. Using votes that both are and are not electorally significant as their dependent variable, they test a probit model intended to predict whether roll call votes will yield electoral implications. They ultimately find that the extent to which a particular roll call is controversial, prominently covered by the media, and subject to intra-party disagreement plays an important role in determining whether or not it has electoral consequences.

Beyond attempting to address a persistent question in the congressional literature, extant work on the House facilitates our understanding of both how and when positions taken on roll calls can yield observable electoral effects. With these results, we now have a better idea why certain roll calls in the House can play such a pivotal role in the subsequent election. Although many of the substantive effects of the significant House votes were somewhat marginal, this should not suggest that positions on roll call votes are without potential consequences. Indeed, these findings offer empirical support for a commonly held perception in the context of legislative voting behavior:

The question facing a legislator is seldom whether a specific roll-call vote might cost him the next election...Each issue may have only a slight impact on a legislator's electoral margin; yet small effects can quickly add up to become large effects when summed over the many issues that Congress considers each year (Arnold, 1990, 61-62).

While the findings in Bovitz and Carson (2000) and Carson (2003) are instructive, their exclusive focus on the House leaves us with a number of unanswered questions. For instance, to what extent are their results generalizable to the U.S. Senate? Are senators more insulated electorally from position taking behavior than their counterparts in the House? Do roll calls with higher levels of saliency have a similar impact on the electoral fortunes of senators as they do on representatives? In an attempt to address each of these questions systematically, this chapter builds upon prior work on the House to extend the discussion to the Senate. From this, I hope to be able to offer insights into mechanisms affecting electoral accountability in the Senate as well as offer a comparative assessment of the differences between the two legislative chambers.

Extending the Analysis to the U.S. Senate

Moving beyond the House-centric approach employed in past research, I examine the issue of electoral accountability and roll call voting in Senate elections to determine whether senators are rewarded or punished for their position taking behavior. From a comparative perspective, Senate elections have received far less scholarly attention than elections to the U.S. House of Representatives. With notable exceptions in the work by Mann (1978), Mann and Wolfinger (1980), Hinckley (1980a), and Jacobson (1980), most early analyses of congressional elections focused almost exclusively on the House.

While this emphasis helped illuminate a number of important findings in the context of

House elections, it did little to identify significant patterns or trends in association with Senate elections or allow comparisons to be drawn between House and Senate elections.

Over time, and especially in recent years, Senate elections have begun to receive slightly more attention by students of congressional elections. For instance, Wright and Berkman (1986) examined the 1982 U.S. Senate elections to determine the extent to which policy issues played a role in the selection of senators. Using data from the CBS News/ New York Times 1982 congressional poll and from 23 statewide exit polls, they found that Senate candidates behave as though policy issues matter to their constituents and that voters are systematically responsive to the policy positions of U.S. senators. This finding challenged much of the previous research, which had suggested that policy considerations were of relatively minor importance in congressional elections.

In the early 1990s, further emphasis on the Senate helped illuminate a number of relevant findings in the context of Senate elections. Most notably, students of elections began to recognize that Senate elections are considerably more competitive than House elections, due largely to the greater number of experienced candidates challenging Senate incumbents (see, e.g., Westlye 1991; Abramowitz and Segal 1992; Krasno 1994). Unlike most House incumbents who generally face lawyers or other candidates lacking electoral experience, incumbent senators typically face experienced challengers or well-known amateurs (Krasno 1994), which tends to increase the challengers' visibility and makes for a harder fought and more intense electoral campaign.²⁴

²⁴ This is especially true given the greater amount of media coverage afforded Senate races since there are fewer of them in a given electoral cycle (on this point, see Abramowitz 1988; Kuklinski and Sigelman 1992). With more media attention devoted to the challenger (and thus more campaign visibility), incumbent senators have to work substantially harder to get reelected.

In addition to campaign intensity, the influence of money in Senate elections has also received attention in the context of congressional elections research. In discussing the impact of campaign spending on Senate elections, Gerber (1998) challenges the prevailing notion that spending by the incumbent has little or no effect on the election outcome (see, e.g., Jacobson 1980, 1985; Abramowitz 1988; Grier 1989). Arguing that much of the previous findings concerning the impact of incumbent spending are biased statistically, Gerber adopts an instrumental variables approach in his analysis of Senate elections. As a result, when the endogeneity issues associated with campaign spending are statistically controlled for, Gerber (1998: 409) contends that the marginal effects of incumbent and challenger spending are approximately the same.²⁵ Thus, he concludes that balancing the spending levels of Senate candidates could fundamentally alter the electoral environment for both incumbents and challengers.

Recent work by Kahn and Kenney (1999) has also helped to further illustrate the implications of the greater competitiveness of Senate elections. In focusing on Senate races between 1988 and 1992, Kahn and Kenney examine the extent to which campaign intensity influences the behavior of the voting population. As the news media tends to place a greater emphasis on Senate races (due to their greater competitiveness) than those held in the House, they find that the central themes of both of the candidates come to the forefront of the political campaign. Consequently, voters become more aware of the positions advanced by competing candidates and become more knowledgeable when heading to the voting booth. In the end, more knowledgeable citizens make informed

²⁵ Although Gerber (1998) utilizes a two-stage least squares model in his analysis of campaign spending in Senate elections, I do not adopt his approach in this paper since the relative influence of campaign spending by incumbent senators is not the central focus of this analysis. Whereas incumbent spending was the central explanatory variable included in Gerber's analysis, I simply include it as a control variable to evaluate the degree to which spending by the incumbent offsets position taking behavior.

decisions when selecting between the competing candidates, thus increasing the relative degree of accountability in Senate races.

In thinking about the mechanisms by which roll call votes translate into vote gain or loss for incumbents, there are at least four ways in which positions on roll calls might have a significant impact on a member's vote share. First, constituents who previously supported an incumbent could decide to withhold support from that legislator based on their position taking behavior on a series of roll calls. Second, positions expressed on roll call votes could stimulate turnout among those constituents who are strongly opposed to the views expressed by the incumbent, thus reducing his or her electoral margin during the next election (the reverse may also be true—positions expressed on key roll calls could stimulate turnout among constituents strongly in favor of the views expressed by the incumbent, thus enhancing turnout). Third, voters who had not previously supported an incumbent could change their minds and decide to support a legislator based on his/her position taking behavior. Lastly, experienced challengers could emerge in response to the positions taken by the incumbent, thereby providing the voters with a viable alternative(s) to the incumbent (thus implying vulnerability) during the next election.

The preceding discussion provides a basis for thinking about issues of electoral accountability and roll call voting in the U.S. Senate from a purely theoretical viewpoint. Based on similarities between the House and the Senate in terms of roll call voting, the earlier findings concerning House elections give us related expectations about electoral accountability in the context of Senate elections. For instance, we should expect to find considerable variation in the types of Senate key votes that yield electoral implications. While the issues taken up in the Senate may be slightly different than those considered in

the House, they should still deal with a diverse array of issues, many of which will garner sufficient interest from attentive publics (Arnold 1990: 64). Additionally, those persons most capable of using legislators' behavior as a political device—namely, party activists, prospective challengers, and political elites—have ample opportunities to become aware of key votes and, in turn, transform them into electorally salient political issues.

Given the variation in House and Senate elections presented earlier, we might also expect differences in electoral implications of roll call voting in the Senate. To begin, the greater competitiveness of Senate races may result in an increased number of electorally consequential roll calls for incumbent senators. With a greater proportion of experienced candidates vying for a limited number of Senate seats, the election campaign may focus more heavily upon specific policy issues or positions (see, e.g, Wright and Berkman 1986; Kahn and Kenney 1999). In particular, the positions Senate incumbents express on prominent roll calls may become salient issues in an upcoming election campaign, especially if they diverge from the overriding interests of a legislator's constituency.

We might also expect variation in the electoral consequences of roll call voting in the Senate due to certain inherent differences between the House and Senate. As Mayhew (1974a: 66) argues, controversial positions taken on one or even a few isolated roll calls should not normally have an enormous impact on an incumbent's chances of getting reelected. However, Mayhew also asserts that

On rare occasions single roll calls achieve a rather high salience among the public generally. This seems especially true of the Senate, which every now and then winds up for what might be called a "showdown vote," with pressures on all sides, presidential involvement, media attention given to individual senators' positions, and suspense about the outcome (Mayhew 1974: 67).

Thus, it would seem that if the stakes are high enough, the positions expressed on even a single roll call vote in the Senate could spell electoral disaster for an incumbent senator given the greater scrutiny afforded roll call voting behavior in the Senate. Moreover, given the smaller size of the Senate, single-vote margins of victory (or defeat) are more likely to occur, thus making it easier for voters or political elites to assign credit or blame for positions adopted on key votes in the Senate.

The nature of the legislative agenda in the Senate might also influence the extent to which roll call votes yield observable electoral consequences. Unlike the House, the Senate routinely deals with treaty ratifications and presidential nominations (e.g., judicial and cabinet posts). Given the highly visible and potentially contentious nature of such decisions, expressing a controversial position on a roll call could severely undermine a senator's chances of getting reelected. In particular, an incumbent senator with a track record of one or a series of controversial positions could attract an experienced and well-financed challenger in the next election, making it extremely difficult for the incumbent to retain his or her seat.

Additionally, the differences in members' constituencies may also influence the relative frequency of electorally consequential roll calls in the Senate. Since members of the House represent roughly the same number of persons per district within a specific geographic region, their constituencies tend to be relatively homogeneous. As a result, the positions House members express on roll calls may be less likely to stimulate conflict among their constituents due to greater similarities in voter preferences. Senators, on the other hand, often represent large and more heterogeneous constituencies, making it more difficult to avoid alienating segments of the population with their roll call behavior. For

this reason, we should expect positions expressed by senators on key roll call votes to be of greater electoral consequence than those recorded by their colleagues in the House.

Moving beyond discussion of the frequency of electorally consequential roll calls, what types of factors might impact whether roll call positions have observable electoral implications? One relevant factor may be the underlying degree of conflict on the roll call as measured by the closeness of the vote. Roll calls that elicit controversy in the form of a close vote may be more likely to stimulate attention on the part of attentive publics. A related factor in determining the electoral implications of a given roll call position is the political salience of the legislation under consideration. Many bills considered in the Senate are brought to the floor and routinely passed into law with little notice paid to them by political elites, constituents, or interest groups. However, those involving highly visible issues that receive widespread coverage should be the most likely to produce significant electoral effects.

Aside from factors such as the degree of controversy associated with or saliency of votes in Congress, one must also consider the broader political context under which issues are brought up in the Senate. To a certain degree, whether or not legislation will be viewed as controversial or salient will depend upon the characteristics of the political environment and the nature of the issue under consideration. For instance, votes that occur during an election year may be more likely to yield significant electoral effects than those taken during non-election years. Also, factors such as the occurrence of divided government or the type of vote under consideration may also play a role in translating particular roll calls into electorally salient issues.

Data and Methods

To a certain extent, students of congressional elections have focused primarily on House elections since they are easier to study systematically than Senate elections. To examine the electoral consequences of roll call voting in a given House election, for instance, one need only examine the voting behavior of representatives for the preceding Congress since House members come up for reelection every two years. Since senators are elected for six-year terms, in contrast, it is necessary to examine their voting behavior for the three preceding congresses if one hopes to determine whether their roll call voting behavior on key votes impacts their electoral fortunes. Additionally, given that only one-third of the Senate is up for reelection at any particular time, one needs to recognize that roll call positions may impact senators differently due to variation in the proximity to the election.

To address the question regarding the frequency of electorally consequential roll calls in the Senate, I utilize an Ordinary Least Squares (OLS) multivariate regression analysis similar to those adopted in the elections literature (see, e.g., Jacobson 1993, Sellers 1997) and in the previous analyses on the House (see Bovitz and Carson 2000; Carson 2003).²⁶ The model I employ incorporates the usual predictors of congressional election outcomes while adding an additional explanatory variable—namely, legislators' positions on individual key votes. This method facilitates empirical estimation of the impact of incumbents' positions on key votes (i.e., the central explanatory variables) on election returns (i.e., the dependent variable to be explained), while controlling for the

²⁶ Unlike previous and related research on the House, I elected not to run the analysis separately for Democratic and Republican incumbents due to the limited number of Senate elections in a given year (only one-third of the Senate is up for reelection during any election cycle).

effects of other factors known to affect election outcomes (see, e.g., Jacobson 2001). As modeled, the regression coefficients for each roll call will reflect the estimated change in the incumbent's share of the two-party vote that results from an affirmative position on key votes taken in the Senate.

The dependent variable is the incumbent's share of the two-party vote in legislator i 's state during year t . The principal explanatory variables are the legislators' positions on each of the key roll call votes from year t and $t-1$ for each of the preceding congresses (i.e., the roll call votes from both sessions of the three congresses prior to the election). To isolate the effects of legislative position taking on electoral fortunes, I control for a variety of factors known to affect incumbent vote share. In particular, I include control variables for legislators' electoral security, the underlying partisanship of the state, incumbent and challenger spending, and challenger quality.

In sum, I posit the following model of legislators' electoral vote margins:

$$\text{INCUMBENT VOTE SHARE} = \alpha + \beta_1 \text{Electoral Security} + \beta_2 \text{State Partisanship} + \beta_3 \text{Incumbent Spending} + \beta_4 \text{Challenger Spending} + \beta_5 \text{Challenger Quality} + \beta_6 \text{Voting Record} + \beta_7 \text{Key Vote} + \varepsilon$$

Key Vote represents the position incumbents took with respect to each key roll call vote and is coded 1 for an affirmative position and 0 otherwise. Electoral Security reflects the percentage of the two-party vote the incumbent senator received in the previous election. State Partisanship is measured in terms of the popular vote for president received in each state.

To control for the effects of both incumbent spending and challenger spending, following Jacobson's seminal work on money in elections, I include the natural logarithm of both dollar amounts as separate independent variables in the model (Jacobson 1980:

40).²⁷ The variable for Challenger Quality is dichotomously coded as a 1 if the candidate has previously held elected office, 0 otherwise. This coding also follows Jacobson's classic study that views having run a successful elective campaign as a proxy for candidate quality.²⁸

Additionally, I use Voting Record to control for the legislators' general voting tendencies as reflected by their first dimension DW-NOMINATE scores (see, e.g., Poole and Rosenthal 1997). These scores provide summary statistics of legislators' overall voting tendencies on the traditional liberal-conservative economic dimension. DW-NOMINATE scores for legislators range from -1 to 1, with low scores indicating policy liberalism and high scores indicating policy conservatism. By including this variable in the model, I seek to control for the legislator's general ideological reputation and, in turn, isolate the impact of a particular roll call decision that may or may not be consistent with the incumbents' broader voting record.²⁹

Exploring the Frequency of Electorally Consequential Roll Calls in the Senate

A summary of the estimated electoral consequences of *CQ* key votes for the 1974-2000 Senate elections are displayed in Table 4 where I report the percentage of key

²⁷ As Jacobson (1980) argues, the advantage of using the natural logarithm of campaign expenditures for empirical analysis of elections is that doing so avoids the assumption of a linear relationship between money and votes, thereby accounting for diminishing marginal returns from campaign spending.

²⁸ See Gary C. Jacobson, *Money in Congressional Elections* (1980): 106-107. For an alternative view on how to measure challenger quality, see Donald Philip Green and Jonathan S. Krasno (1988).

²⁹ One might argue that controlling for members' overall voting record as reflected by their NOMINATE score results in a fairly stringent test of the electoral impact of individual roll calls given that roll calls are in the model twice. However, including both the individual-level vote and the NOMINATE score in the model does not make it more difficult to find significant electoral effects since a single roll call represents a fairly negligible component of a member's voting record. To verify this claim, I reran the OLS models for the first part of the analysis without the NOMINATE score and found that the results did not substantively change. I nevertheless included the legislators' NOMINATE scores in the model to determine if individual votes served as a proxy for defections from general voting tendencies.

votes that yielded observable electoral effects for incumbent senators.³⁰ As shown in the table, there is considerable variation in the proportion of key votes that are electorally consequential across the elections included in the analysis. Nearly one-fourth of the key votes in the 97th-99th Congresses appear to be significant for those senators running in the 1986 election, for instance, compared with only two percent of those prior to the 1978 election showing up as electorally consequential. On the whole, it appears that routinely between 10-20 percent of Senate key votes yield electoral effects for incumbent senators, somewhat more than we should expect by chance alone.

Table 4 - Percentage of CQ Senate Key Votes With Significant Electoral Impact, 93rd-106th Congresses

Senate Election	% Of "Key" Roll Calls Significant for Senators	Total Number of Key Votes Prior to the Election
1974 Election	11.1	90
1976 Election	14.6	96
1978 Election	2.1	95
1980 Election	13.7	95
1982 Election	9.6	94
1984 Election	15.6	90
1986 Election	24.1	87
1988 Election	18.6	86
1990 Election	18.7	91
1992 Election	3.2	93
1994 Election	13.7	95
1996 Election	12.8	94
1998 Election	14.0	86
2000 Election	21.5	79

³⁰ I begin with an examination of the 1974 Senate elections since this is the first year that comprehensive campaign finance for individual Senate races is available.

Also of interest from Table 4 is the suggestive pattern that may be a result of different cohorts of members seeking reelection from one election to the next. Not only do the results indicate that roll call votes reach varying degrees of electoral salience based on the underlying political context, but there may also be considerable variation among incumbent senators in terms of which votes will yield observable electoral effects. This is a particularly interesting finding (especially when compared to the House) as it would appear to confirm the expectation that saliency of roll calls vary both across time and across individual members.

Turning to more specific vote information, Tables 5-18 display estimates from the 1974-2000 Senate elections where I report the vote-specific information for each roll call.³¹ Each coefficient reported in the tables represents the estimated impact of voting “yea” on the corresponding roll call vote. A total of 173 out of 476 (36%) of CQ Senate key votes yielded a statistically significant impact on incumbent senators’ electoral fortunes.³² Due to limited space considerations, I only report coefficients for key votes in the table that are statistically significant in the Senate elections.³³

³¹ All relevant information concerning bill descriptions, the date the roll call was voted upon, and the vote tally was taken from Congressional Quarterly’s Annual Series, *Congressional Roll Call* from 1969-2000.

³² Since the possibility exists that some of the significant findings reported in Tables 5-18 could be due to “false positives” resulting from similar alignments of voting coalitions among members (particularly in the Senate as a result of its smaller membership), it is important to touch upon this issue briefly. As it now stands, the positions that legislators take on a specific key vote could appear electorally consequential (even though they actually may not be) simply because the same members that voted together on a previously significant vote also did so on a subsequent vote. Nonetheless, I do not believe that this potential issue undermines the reported findings for two main reasons. First, from a purely theoretical perspective, there is little reason to suspect that the same coalitions of legislators routinely join together and vote the same way *except* in those circumstances when their positions are likely to set them apart electorally from other members. Second, when I conducted an analysis (results not shown) combining senators’ voting patterns across all Senate key votes into a party unity score (to reflect the proportion of times members voted with a majority of their party) and included it in the original models, the results revealed considerable variability in significance both across legislators and over time. Given that the pattern exhibited sufficient variation (instead of appearing monotonic), it would appear that the likelihood of obtaining false positives in the results is minimal.

³³ I chose not to report the coefficient results for the control variables in the model due to space limitations. Overall, the pattern of results for these variables is consistent with extant work on Senate elections.

Table 5 – Key Votes Yielding Significant Electoral Effects in 1974 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Tax Reform	91	12/1/69	30-62	-7.35**	3.17
Labor-HEW Appropriations	91	12/17/69	52-37	-6.66*	3.57
Drug Control	91	1/27/70	35-50	4.79*	2.61
Voting Rights Act Amendments	91	3/12/70	64-17	-9.13**	3.34
Revenue Act of 1971	92	11/22/71	52-47	6.83*	3.87
Equal Rights Amendment	92	3/22/72	84-8	-20.10**	3.95
Federal Aid Highway Program	92	9/19/72	48-26	-5.74*	2.74
Debt Ceiling	92	10/17/72	27-39	-6.48**	2.96
Farm Program Extension	93	6/8/73	42-44	-5.82**	1.78
Capital Punishment Standards	93	3/13/74	54-33	-5.44*	3.02

Table 6 – Key Votes Yielding Significant Electoral Effects in 1976 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Public Works Acceleration	92	7/14/71	57-36	10.19*	5.59
Rehnquist Nomination	92	12/10/71	68-26	10.76**	5.05
Equal Employment Opportunities Enforcement	92	2/15/72	45-39	10.88**	3.18
Omnibus Education Amendments of 1972	92	2/29/72	63-34	-9.31**	1.96
Foreign Military Aid Authorizations	92	7/24/72	42-48	5.70*	3.08
Debt Ceiling	92	10/17/72	27-39	-5.85*	2.70
Second Supplemental Appropriations, 1973	93	5/29/73	55-21	11.99*	5.47
National Energy Emergency Act	93	11/15/73	40-48	7.04**	2.78

Northeast Rail Reorganization	93	12/11/73	37-59	-9.94**	5.47
Sinai Agreement	94	10/9/75	70-18	-4.74*	2.57
Defense Department Appropriations	94	12/19/75	54-22	11.03**	3.44
Food Stamp Reform Act	94	4/8/76	52-22	13.77**	2.52
Clean Air Act Amendments	94	8/3/76	31-63	6.58**	2.27
Tax Revision	94	8/5/76	48-42	-6.40*	3.32

Table 7 – Key Votes Yielding Significant Electoral Effects in 1978 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
ERDA Authorizations	94	6/25/76	31-50	-17.13**	1.69
Waterway User Fees	95	5/3/78	43-47	-3.67*	1.75

Table 8 – Key Votes Yielding Significant Electoral Effects in 1980 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Amend Cloture Rule	94	3/5/75	73-21	15.74**	7.38
Open Senate Committee Meetings	94	11/5/75	16-77	-18.25**	4.70
Defense Department Appropriations, 1976	94	11/18/75	52-47	9.96*	5.32
Federal Election Commission	94	3/16/76	46-47	-13.90**	6.11
Intelligence Committee	94	5/19/76	31-63	-10.27*	5.18
Defense Procurement Authorization	94	5/20/76	44-37	-8.63**	4.06
Social Security Financing	95	11/4/77	42/41	-12.05**	5.28

Airline Deregulation	95	4/19/78	69-23	14.14**	4.71
Emergency Farm Bill	95	3/21/78	67-26	-11.14**	2.22
Fiscal 1980 Binding Budget Levels	96	9/18/79	55-42	-10.00**	4.06
Abolishment of the Electoral College (Const. Amendment)	96	7/10/79	51-48	7.84*	4.35
State, Justice, Commerce, Judiciary Appropriations, 1981	96	9/26/80	43-39	-10.99*	5.66
Fiscal 1981 Continuing Appropriations	96	9/29/80	47-37	-10.04**	4.69

Table 9 – Key Votes Yielding Significant Electoral Effects in 1982 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Public Officials' Integrity Act	95	6/27/77	74-5	6.92**	2.26
ERA Deadline Extension	95	10/4/78	44-54	6.26**	2.24
Elementary and Secondary Education Act Amendments	95	8/23/78	49-47	-5.74**	2.26
Foreign Aid Appropriations, Fiscal 1980	96	10/9/79	49-46	10.30**	3.43
Energy Mobilization Board	96	10/3/79	37-56	8.15**	1.66
Fiscal 1981 Budget Targets	96	5/7/80	64-30	6.60**	2.59
Windfall Profits Tax	96	3/27/80	66-31	-7.27**	3.31
Budget Reconciliation Tax Increases	97	7/22/82	50-47	-9.88**	2.95
Transportation Assistance Act of 1982	97	12/20/82	56-34	-6.41**	2.48

Table 10 – Key Votes Yielding Significant Electoral Effects in 1984 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Sen. Herman E. Talmadge Investigation	96	10/11/79	81-15	9.43**	3.87
Windfall Profits Tax	96	12/12/79	44-53	9.73**	4.32
Trucking Deregulation	96	4/15/80	70-20	-9.18**	1.56
Domestic Violence	96	9/4/80	46-41	-7.94*	4.11
Oil Import Fee/Debt Limit	96	6/6/80	68-10	-9.01**	2.41
Tax Cuts (Motion to Kill)	96	9/25/80	54-38	-11.36**	3.79
Energy and Water Develop. Appropriations, Fiscal 1982	97	11/4/81	46-48	7.53**	2.49
Debt Limit Increase	97	2/6/81	73-18	6.77**	3.17
Urgent Supplemental Appropriations, Fiscal 1982	97	5/27/82	69-23	-10.24**	2.17
Balanced Budget/Tax Limitation Amendment	97	8/4/82	69-31	-7.44**	3.08
Outside Income of Senators	97	12/14/82	54-38	-5.50**	2.40
Supplemental Appropriations, (Senator Salary Increase)	98	6/16/83	49-47	-5.81**	2.47
Deficit Reduction	98	4/12/84	62-19	-5.87**	2.23
Deficit Reduction	98	5/17/84	65-32	-10.35**	3.87

Table 11 – Key Votes Yielding Significant Electoral Effects in 1986 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Energy and Water Develop. Appropriations, Fiscal 1982	97	11/4/81	46-48	4.22**	1.57
Energy and Water Develop. Appropriations, Fiscal 1982	97	11/4/81	48-46	-4.98**	2.39

Fiscal 1981 Supplemental Appropriations	97	5/20/81	49-48	-10.23**	4.39
Agriculture and Food Act	97	9/18/81	41-40	-4.31**	1.83
First Budget Resolution, 1983	97	5/21/82	49-43	-10.51**	4.18
Continuing Appropriations, Fiscal 1983/MX Missile	97	12/16/82	56-42	-7.09**	3.54
Continuing Appropriations, Fiscal 1983/Clinch River	97	12/16/82	49-48	-5.91**	2.07
Continuing Appropriations, Fiscal 1983/FTC	97	12/16/82	59-37	-4.11*	2.18
Continuing Appropriations, Fiscal 1983	97	12/16/82	46-50	-6.87*	3.66
Emergency Supplemental Appropriations, Fiscal 1983	98	3/11/83	34-53	13.05**	3.45
Supplemental Appropriations, Salary Increase for Senators	98	6/16/83	49-47	-4.96**	2.00
Multinational Force in Lebanon	98	9/29/83	54-46	-10.51**	4.18
Labor, Health, and Human Services, Education Approp.	98	10/4/83	50-45	-11.92**	2.91
Defense Department Appropriations, Fiscal 1984	98	11/7/83	37-56	7.17**	2.80
Omnibus Defense Authorization	98	6/14/84	49-48	-7.67**	1.89
Motor Vehicle Safety/ Minimum Drinking Age	98	6/26/84	81-16	-5.81**	2.24
Continuing Appropriations, Fiscal 1985	98	9/27/84	51-48	6.88*	3.59
First Budget Resolution, 1986	99	5/9/85	50-49	-7.99**	3.71
Superfund Reauthorization, Fiscal 1986-90	99	9/24/85	49-45	-6.15**	1.91
Daniel A. Manion Nomination	99	6/26/86	48-46	-12.43**	3.11
South Africa Sanctions	99	10/2/86	78-21	-6.17**	2.32

Table 12 – Key Votes Yielding Significant Electoral Effects in 1988 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
First Budget Resolution, 1984	98	5/19/83	50-49	6.14*	3.34
Debt Limit Increase	98	10/31/83	39-56	4.72*	2.53
Agricultural Programs Adjustment Act	98	3/22/84	78-10	-10.20**	3.87
Department of Agriculture Urgent Supplemental Approp.	98	4/4/84	59-36	-5.33**	1.73
Motor Vehicle Safety/ Minimum Drinking Age	98	6/26/84	81-16	9.74**	3.62
Continuing Appropriations, Fiscal 1985	98	9/27/84	51-48	-9.68**	4.30
State Department Authorizations, Fiscal 1986- 87	99	6/7/85	71-13	7.93**	3.75
Aid to Nicaraguan Rebels	99	3/27/86	53-47	8.75*	4.62
Department of Defense Authorization, Fiscal 1987	99	8/5/86	50-49	6.15*	3.20
Fiscal 1988 Budget Resolution	100	5/6/87	56-42	-10.22**	4.37
Defense Authorization/Missile Tests	100	9/17/87	58-38	-8.50*	4.81
Bork Nomination	100	10/23/87	42-58	10.22**	4.37
Housing and Community Development/Budget Waiver	100	11/17/87	57-43	-6.60*	3.60
Fiscal 1989 Defense Authorization/SDI Funding	100	5/11/88	48-50	-7.56**	3.23
INF Treaty/Ground- Launched Cruise Missile Definition	100	5/25/88	28-69	-7.08**	2.78
Catastrophic Health Insurance/ Conference Report	100	6/8/88	86-11	-13.50**	1.92

Table 13 – Key Votes Yielding Significant Electoral Effects in 1990 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
First Budget Resolution	99	5/9/85	50-49	-15.07*	7.97
Department of Defense Authorization, Fiscal 1986	99	6/4/85	38-57	11.30**	3.06
Public Debt Limit	99	10/9/85	75-24	5.58*	2.94
Public Debt Limit/Anti- Deficit Act	99	7/30/86	63-36	6.37**	2.69
Department of Defense Authorization, Fiscal 1987	99	8/5/86	50-49	-10.39**	4.71
Fiscal 1988 Budget Resolution	100	5/6/87	56-42	15.22**	7.46
Temporary Debt-Limit Increase/Deficit Targets	100	7/31/87	41-52	14.14**	4.14
Senate Campaign Finance	100	9/15/87	51-44	10.41*	5.42
Housing and Community Development/Budget Waiver	100	11/17/87	57-43	10.21**	4.97
Catastrophic Health Insurance/Conference Report	100	6/8/88	86-11	-7.34*	3.86
Fiscal 1989 Defense Appropriations/Contra Aid	100	8/10/88	49-47	14.55*	7.90
John Tower Nomination	101	3/9/89	47-53	-9.35*	5.09
Fiscal 1989 Supplemental Appropriations/Budget Act	101	6/1/89	77-18	6.55**	2.37
Child Care/Dole Substitute	101	6/22/89	44-56	-14.50*	7.93
Government Pay-and-Ethics Package/Pay Raise	101	11/17/89	56-43	-4.85*	2.71
Clean Air Act Reauthorization/ Coal Miner Benefits	101	3/29/90	49-50	-5.59**	2.24
Campaign Finance Overhaul	101	7/30/90	46-49	-17.92**	5.48

Table 14 – Key Votes Yielding Significant Electoral Effects in 1992 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Civil Rights Restoration Act/ Veto Override	100	3/22/88	73-24	-10.34**	4.09
Americans w/ Disabilities Act	101	7/13/90	91-6	15.28**	1.54
Fiscal 1993 Defense Authorization/SDI	102	8/7/92	43-49	-4.89*	2.70

Table 15 – Key Votes Yielding Significant Electoral Effects in 1994 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Fiscal 1989 Supplemental Appropriations/Budget Act	101	6/1/89	77-18	-4.16**	2.09
Catastrophic Revision/ Durenberger Substitute	101	10/6/89	37-62	4.60**	2.07
Clean Air Act Reauthorization/ Coal Miner Benefits	101	3/29/90	49-50	-7.75**	2.98
Omnibus Crime Package/ Assault-Style Weapons	101	5/23/90	48-52	-4.48*	2.34
Farm Programs Reauth./Sugar Price Supports	101	7/24/90	54-44	6.01**	2.47
Fiscal 1991 Defense Approp./ Troop Cuts	101	10/15/90	46-50	-5.50**	2.39
Crime Bill/Handgun Waiting Period	102	6/28/91	67-32	-7.58**	3.48
Conditional MFN for China	102	7/23/91	55-44	4.69*	2.42
Clarence Thomas Confirmation Vote	102	10/15/91	52-48	-12.55**	2.37
Campaign Finance	102	5/13/92	57-42	-11.45**	4.58
Family Planning Amendments	102	10/1/92	73-26	-7.58**	3.48

Cable Television Reregulation	102	10/5/92	74-25	-6.24**	2.19
Lift U.S. Trade Embargo with Vietnam	103	1/27/94	62-38	-10.15**	2.70

Table 16 – Key Votes Yielding Significant Electoral Effects in 1996 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Use of Force Against Iraq	102	1/12/91	52-47	-4.35**	1.78
Conditional MFN for China	102	7/23/91	55-44	3.97*	1.77
CFE Treaty Implementation/ Soviet weapons dismantlement	102	11/25/91	86-8	4.28**	1.70
Aid for Former Soviet Republics/Russian Troops	102	7/1/92	35-60	-3.87**	1.55
Fiscal 1993 Defense Authoriz./ Nuclear Testing Moratorium	102	9/18/92	55-40	-5.22**	2.65
Campaign Finance	103	6/17/93	60-38	-6.73**	2.51
Abortion Clinic Access	103	5/12/94	69-30	4.24**	2.12
Fiscal 1995 Defense Authoriz./ Unilateral Termination	103	7/1/94	50-50	3.72*	2.02
General Agreement on Tariffs and Trade (GATT)	103	12/1/94	68-32	4.06**	1.85
Shareholder Lawsuits	104	12/22/95	68-30	-4.51**	2.12
Line-Item Veto	104	3/27/96	69-31	-4.76**	2.28
Fiscal 1997 Budget Resolution/ Centrist Coalition Alternative	104	5/23/96	46-53	4.72**	1.51

Table 17 – Key Votes Yielding Significant Electoral Effects in 1998 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Ruth Bader Ginsburg Confirmation	103	8/3/93	96-3	8.17**	3.32
Fiscal 1994 Defense Authoriz./ Strategic Weapons	103	9/9/93	50-48	-3.90*	2.02
Omnibus Crime/Assault Weapons Ban	103	11/17/93	56-43	5.41**	2.70
Fiscal 1994-95 State Dept. Authorization/Vietnam	103	1/27/94	62-38	4.59**	1.79
Abortion Procedures	104	12/7/95	54-44	-4.56**	1.73
Budget Reconciliation Welfare Overhaul	104	8/1/96	78-21	-4.87*	2.55
Abortion Procedure Ban	104	9/26/96	57-41	-5.26**	1.40
Abortion Procedure Ban	105	5/20/97	64-36	-4.25**	1.88
Fast Track Procedures	105	11/4/97	69-31	3.41*	1.82
NATO Expansion	105	4/30/98	41-59	-3.55*	1.88
Skilled Worker Visas	105	5/18/98	78-20	6.25**	2.53
“Partial Birth” Abortion	105	9/18/98	64-36	-4.25**	1.88

Table 18 – Key Votes Yielding Significant Electoral Effects in 2000 Senate Elections

<i>Roll Call</i>	<i>Congress</i>	<i>Date</i>	<i>Vote Result</i>	<i>Coefficient</i>	<i>Robust St. Error</i>
Product Liability Overhaul	104	5/4/95	47-52	-2.62**	0.86
Abortion Procedures	104	12/7/95	54-44	-11.81**	4.16
Shareholder Lawsuits	104	12/22/95	68-30	7.32**	3.14
Cuba Sanctions	104	3/5/96	72-22	-8.08**	2.79
Fiscal 1997 Budget Resolution/ Centrist Coalition Alternative	104	5/23/96	46-53	6.41**	2.33
Campaign Finance Overhaul	104	6/25/96	54-46	14.03**	3.97
Sexual Orientation Non- Discrimination	104	9/10/96	49-50	10.37**	3.55
Chemical Weapons Treaty	105	4/24/97	74-26	5.16**	2.56
Abortion Procedure Ban	105	5/20/97	64-36	-10.63**	3.63
Campaign Finance Overhaul	105	10/7/97	53-47	14.03**	3.97
Campaign Finance Overhaul	105	2/26/98	51-48	14.03**	3.97
Same-Sex Military Training	105	6/25/98	39-53	-4.68**	2.20
“Partial-Birth” Abortion	105	9/18/98	64-36	-10.63**	3.63
Impeachment of President Clinton-Obstruction of Justice	106	2/12/99	50-50	-14.03**	3.97
Fiscal 2000 Transportation Appropriations (Fuel Use)	106	9/15/99	40-55	9.61**	3.91
Abortion Procedure Ban (Affirm <i>Roe v. Wade</i>)	106	10/21/99	51-47	14.03**	3.97
Missile Defense System Testing	106	7/13/00	52-48	-14.03**	3.79

**p ≤ .05, *p ≤ .10

As was the case with the House, there is considerable variation in the types of issues yielding observable electoral consequences in the Senate. In addition to significant electoral effects associated with votes on appropriations and budgetary issues, we also observe significant effects on votes involving agriculture policy, defense and military issues, educational and environmental policy, health issues, and civil rights legislation. In contrast to the House (given the differential nature of the legislative process in the lower chamber), votes on both treaty ratifications and executive nominations also proved to be electorally consequential for incumbent senators. Most notably, senators who voted in favor of confirming Clarence Thomas's appointment to the U.S. Supreme Court in 1991 and ran for reelection in 1994 suffered nearly a 13% decline in their subsequent vote margin (compared to members who voted against confirmation) as a result of their public position on this key vote.

Also of interest from the results is the sizeable electoral impact of many of the key votes. As hypothesized by Mayhew (1974a), the substantive effect of several of the key votes reported in the tables can be, at times, quite large. To illustrate this point, consider the effects of a "yea" vote on the Americans with Disabilities Act in the context of the 1992 Senate elections. Senators who voted in support of this legislation received an electoral "gain" of slightly more than 15% in the subsequent election when compared with members voting against this measure. In contrast, senators who supported a ban on an abortion procedure prior to the 1996 elections experienced an 11% loss in electoral support, even controlling for factors such as campaign spending and the underlying support in their constituencies.

While these votes initially appear to be of enormous electoral consequence, one needs to place them in the appropriate perspective to fully appreciate their impact on incumbent senators' chances of reelection. In the first place, incumbent senators seeking reelection do not run on the basis of one or even a few votes in Congress, even when those votes are especially prominent or salient. Instead, they run based on their entire record, which may involve a considerable number of controversial positions on important legislation. As such, it is important to keep in mind the *combined* effect of electorally consequential roll calls. Just because a particular vote impacts an incumbent's vote margin by 10 or 12 percent does not mean that *specific* effect will be felt at the election since a member's chances of reelection are influenced by his or her combined roll call voting record. Accordingly, a number of recorded roll call positions could produce observable individual effects in both a positive and negative direction, yet cancel each other out when the election rolls around.³⁴

One additional pattern of interest in Tables 5-18 pertains to the proximity of key votes to the upcoming election and their related electoral significance. While some might argue that the proximity of a vote to the upcoming election should be an important factor in predicting whether or not votes yield significant electoral effects, the results show that electorally significant votes are not confined to the session immediately preceding the election. Indeed, a considerable proportion of electorally consequential roll calls (74%) are voted upon in the first four years of individual senators' terms of office. This should not come as a surprise, however, given the cumulative nature of a senator's voting record.

³⁴ At the same time, however, an extended pattern of controversial positions on key votes could have combined negative consequences in the subsequent election, especially if these effects are not offset by more electorally beneficial roll call votes. Furthermore, it is still *possible* for a controversial vote in the Senate to have an enormous impact on an incumbent's margin, especially if that vote becomes the focus of attention in the next campaign.

During a span of six years, a senator may be called upon to express thousands of roll call positions, many of which may be questioned in his or her home state depending on the underlying political context. Over time, a senator's roll call record may become the focus on his or her next reelection campaign, especially if an experienced challenger emerges to exploit positions that are "out of step" with the constituency.

Substantively, the preceding results have implications for our understanding of electoral accountability in the context of House and Senate elections. First, when the results for the Senate are compared with previous analyses of the House, it appears that there are a greater proportion of electorally consequential roll calls in the former chamber than in the latter. This is not entirely unexpected, however, given that Mayhew (1974a) has argued that we should see more observable effects from position taking in the Senate than in the House. Additionally, it appears that many of the issues taken up in the Senate are more likely to attract the attention of political elites, experienced challengers, and the general electorate due to more extensive coverage of the Senate chamber (Abramowitz 1988; Kuklinski and Sigelman 1992). To a considerable extent, senators may be held to a greater level of accountability than their colleagues in the House for the positions they express on prominent issues such as key votes.³⁵

Moreover, the results suggest that a sizeable proportion of the roll calls on key votes in the Senate appear to have rather large marginal effects for incumbent senators seeking reelection. While previous analyses found evidence of electorally consequential

³⁵ To be clear, greater accountability does not imply that senators who take roll call positions that are "out of touch" with their constituencies will necessarily be removed from office. All else equal, incumbents often have a certain degree of leeway in expressing controversial positions as a result of their comfortable electoral margins. Thus, while position taking behavior on roll calls can and does produce effects at the margins, it is somewhat impractical to expect it to exert a direct effect on whether senators are reelected (especially since so few incumbents are defeated in a given electoral cycle).

roll calls in the House, the magnitude of the electoral implications of these votes were considerably less than those voted upon in the Senate. This finding strongly suggests that senators are more likely to be rewarded or punished for their individual roll call behavior than their counterparts are in the House. As before, this could be a function of increased media attention of the upper chamber, greater awareness of Senate roll call behavior by “attentive publics,” or the nature of the issues under consideration in the Senate.

Additionally, these findings lend support to the contention that “attentive publics” are not simply attuned to position taking behavior on key votes in the Senate immediately preceding an election. As was often the case in the context of this analysis, key votes from early in a senator’s tenure can prove to be electorally consequential. Thus, even though senators serve four years longer than their colleagues in the House, they do not appear to be better insulated from electoral considerations as a result of their longer terms of office. In fact, the evidence marshaled in this analysis seems to suggest just the opposite: senators have every reason to be concerned about the positions they express on roll call votes since they often do yield significant electoral effects.

Explaining Variation in the Electoral Significance Across Key Senate Roll Calls

The preceding analysis has illustrated that while a significant proportion of key roll call votes yield observable effects at the margins for incumbent senators, many others fail to produce such effects. This should not come as a surprise given the vast number of roll calls voted upon in the Senate in a given year, of which only a limited proportion can become prominent enough to impact senators’ electoral fortunes. Nonetheless, the earlier findings can begin to help us explore an intriguing theoretical puzzle for those seeking to

understand why certain roll call votes yield electoral consequences for legislators. After all, the preceding results indicate that a sizeable number of roll calls from 1969 to 2000 elicited controversy, became salient political issues, and appear to have had significant electoral effects for incumbent legislators.

To begin to understand *why* certain roll calls—and not others—yield significant electoral effects at the margins for incumbent senators, I draw upon the results from the previous analysis to test whether certain factors systematically impact the likelihood of a vote yielding observable effects. How can this analysis move us down the path toward a theoretical understanding for the *conditions* under which roll calls will be electorally consequential? The results from the earlier regression models provide 474 observations of roll call votes that either do or do not have observable electoral effects for incumbent senators. Using these observations as the dependent variable, I can test an empirical model designed to predict whether votes will have electoral implications.

What factors might affect whether a roll call has electoral effects? Drawing on the earlier theoretical discussion, a number of explanatory variables come to mind. First, if a particular roll call occurred during an election year it may be better positioned to have electoral implications due to its proximity to the upcoming congressional election. Also, if a roll call is a major news story (e.g., it makes the front page of the *New York Times*), then it may be especially salient and, in turn, impact electoral fortunes. The type of vote on which a roll call occurs (e.g., amendment, final passage) may also affect its electoral relevance due to the varying degrees of support on a bill at various stages of the process. Finally, whether or not a roll call vote is conflictual (e.g., 51-49) versus consensual (e.g., 92-8) may also affect the likelihood of it being electorally consequential.

Since the data for this analysis is pooled across multiple elections, it is important to account for fixed effects (see Kennedy 1998: 226-228). To accomplish this, I include dummy variables for all but the 91st Congress as independent variables to control for the possibility that certain congresses may produce more electorally consequential roll calls than others. Along the same lines of thought, I also include a control for the occurrence of divided government in order to better understand what impact, if any, divided government has on the likelihood of a specific vote becoming electorally consequential.

In sum, I posit the following model to explain whether a key roll call vote is electorally significant or not:

$$\text{Pr(Roll Call Electoral Significance)} = \alpha + \beta_1 \text{Election Year} + \beta_2 \text{New York Times} + \beta_3 \text{Conflict Level} + \beta_4 \text{Amendment Vote} + \beta_5 \text{Final Passage Vote} + \beta_6 \text{Divided Government} + \beta_7 \text{Congress-Specific Dummies} + \epsilon$$

The dependent variable—*roll call electoral significance*—is coded 1 if the vote on the roll call has a significant electoral effect according to the earlier regression estimates, and 0 otherwise. Given the binary nature of this variable, I estimate the model using probit, which can accommodate the complexities of estimating a model with a limited dependent variable.

Each variable in the model is measured as follows. Election year is coded 1 for years in which a Senate election occurred, 0 otherwise. New York Times is a dummy variable indicating whether or not the key vote was a front-page story in the *New York Times* immediately following the vote in the Senate (thus, tapping a measure of political saliency for the vote). Conflict Level is measured as the proportion of members who dissent from the majority view on the roll call vote. Votes on Amendments and Final Passage are dichotomous variables and are coded from the annual series, *Congressional*

Roll Call. Divided government is coded 1 if the Senate and the president were controlled by opposite political parties, 0 otherwise. Finally, I include a dummy variable for each Congress, with the exception of the 91st.

**Table 19 – Probit Model of Electorally Significant Roll Call Votes
1974-2000 Senate Elections**

Variable	Democrats	ΔP^{36}
Election Year	0.377** (0.144)	.07
New York Times Front-Page Story	1.811** (0.166)	.56
Divided Government	-0.855** (0.438)	-.08
Level of Conflict	0.692** (0.342)	.03
Vote on Amendment	0.468** (0.181)	.09
Vote on Final Passage	-0.225 (0.204)	
Constant	-1.881** (0.443)	
Pseudo R ²	0.3183	
Log-Likelihood	156.00	
% Correctly Predicted	78.57	
Reduction of Error	49.32	
Sample Size (N)	474	

Note: the coefficients are probit estimates; the dependent variable is 1 if the roll call vote is electorally significant, 0 otherwise; **p ≤ .05

³⁶ The change in predicted probability (ΔP) is calculated from a baseline model using CLARIFY (Tomz, Wittenberg, and King's 1999) where interval-level variables are held at their mean and dichotomous variables are held at their modal value. For interval-level variables, changes reflect an increase of one standard deviation. For dichotomous variables, the values reported reflect changes from one category to the other. For more information about the CLARIFY program, see King, Tomz, and Wittenberg (2000).

The results of the model for electorally consequential roll calls in the Senate are presented in Table 19.³⁷ The probit estimates indicate that roll call votes taken during an election year were more likely to be electorally consequential. The substantive effect of this (and other) variable (s) can be estimated via the change in predicted probability of a roll call yielding electoral effects as the explanatory variable of interest increases one standard deviation (or moves from zero to one) while holding all other variables at their mean or modal values. These estimates are displayed in the table (ΔP) for the covariates yielding significant effects. In this case, roll calls occurring during an election year were 7 percent more likely to yield electoral consequences for incumbent senators.

The results also indicate that votes with high levels of salience as measured by their appearance on the front page of the *New York Times* were significantly more likely to yield observable electoral effects for senators. Indeed, the level of saliency as tapped by this variable exerts the largest substantive effect on the likelihood of a vote producing electoral consequences. All else equal, votes that made the front-page of the *New York Times* were 56 percent more likely to result in observable effects. This is an especially appealing finding as it confirms the original theoretical expectation that votes with higher levels of attention and saliency are more likely to be electorally consequential.

The probit estimates in Table 19 indicate that the level of conflict has a significant positive effect on whether a roll call will be electorally consequential. More specifically, as the level of conflict increases on a given roll call, the higher the probability that a roll call vote will be electorally consequential. While the substantive effect of this variable (3 percent) is rather small, this finding is nonetheless informative. In particular, it suggests

³⁷ To simplify the presentation, I do not report the coefficients and standard errors of the Congress-specific dummy variables in Table 19.

that the more embattled the Senate is over a particular key roll call, the more likely that roll call is to help voters distinguish among candidates in the next election. As a result, those votes that stimulate the most controversy among incumbent legislators should be more likely to become the focal point of a reelection campaign.

In considering the impact of vote type on roll call electoral significance, while votes on amendments are positive and significant, votes on final passage are negative and insignificant. This result is neither surprising nor unexpected, however, given the nature of the legislative process. As the earlier results suggest, roll calls with higher levels of conflict are more likely to elicit controversy than those that are more one-sided. Since amendments tend to be more conflictual and attract greater opposition from legislators, it is not surprising that they should be more likely to be electorally consequential. Votes on final passage, on the other hand, tend to be more lopsided and consensual since many of the differences in opinion have already been worked out prior to the final stages of the legislative process.

Additionally, it appears that the occurrence of divided government significantly affects the likelihood of a roll call yielding electoral consequences. That being said, the incidence of divided government actually reduces the chance of a roll call vote becoming electorally significant. This is an intriguing finding as it suggests that increased conflict between the president and the Senate does not manifest itself in a greater likelihood of electoral significance of roll calls voted upon in this environment. Perhaps this is best explained by increased efforts on the part of senators to downplay those votes that attract greater amounts of opposition from the chief executive.

In sum, this second part of the analysis provides a crucial understanding of the conditions under which one should expect to observe roll calls yielding significant electoral effects. More importantly, it offers a critical first step in the development of a broader theoretical framework for understanding why certain roll calls, and not others, transcend intra-chamber politics and become important political issues in congressional election races. Indeed, the results presented here suggest that factors such as the saliency of the vote and the level of conflict on a roll call determine its electoral relevance for incumbent senators. Additionally, votes occurring during an election year and those taken on amendments are also more likely to become electorally salient during the next election cycle. Additional empirical work building upon these findings should allow us to further refine a theory of the conditions under which roll calls are predicted to yield observable and significant effects for incumbent legislators.

Conclusion

While students of legislative politics have studied the representational connection between substantive positions and electoral outcomes in U.S. House elections, virtually no systematic attention has been given to the same relationship in the context of Senate elections. This paper takes a first step in filling that void in the congressional elections literature by examining the electoral consequences of position taking on key votes from the 1974-2000 Senate elections. In particular, I find that considerable variation exists in the types of issues dealt with in the Senate that yield observable electoral effects. Beyond votes on appropriations or budgetary issues where one would typically expect special interest groups (e.g., Citizens Against Government Waste) to hold members accountable

for their roll call behavior, I find compelling evidence of electoral effects on a range of issues such as agriculture policy, civil rights legislation, and environmental issues. These results are especially interesting as they suggest that senators, like their colleagues in the House, are held accountable for their roll call behavior on a much wider range of issues than previously believed.

Additionally, the results indicate that the substantive effects of many key votes in the Senate can often be quite large. In comparison to the marginal effects of key votes in the House, those in the Senate appear to be substantially larger and more significant in affecting senators' electoral fortunes. Mayhew (1974a) speculated that this might indeed be the case in his discussion of the differential effects of position taking in the House and Senate. As suggested earlier, this finding is most likely a result of more extensive media coverage of the Senate where key votes become considerably more salient to "attentive publics" (Arnold 1990).

The results also reveal substantial variation in the number of Senate votes yielding observable effects at the margins across cohorts of senators. This finding is of particular interest as it suggests roll calls reach different levels of saliency based on which group of senators is up for reelection. On a related issue, the results imply that incumbent senators are not *only* held accountable for the positions they express on roll calls in the two years prior to the upcoming election. Instead, positions expressed by incumbent senators early in their tenure often yield significant electoral effects, suggesting that their longer terms of office do not safeguard them from electoral concerns.

In examining why certain roll call votes and not others yield significant electoral effects for senators, the results from the first part of the analysis provide valuable insights

into the mechanisms affecting the electoral significance of roll calls. Using these results as the dependent variable, I determined that factors such as political saliency and the level of conflict on a roll call significantly impact its electoral significance. Additionally, votes that occur during election years and those that deal principally with amendments are more likely to yield significant electoral effects. In sum, these findings help us begin to understand why certain key roll calls become electorally salient for incumbent senators while others do not.

While the emphasis on the Senate has broadened the scope of analysis regarding the relationship between roll call votes and electoral fortunes, additional empirical work in this mode is necessary to provide more intuition so that reasonable assumptions can be made in the theory-building process. For instance, when, and under what conditions, do incumbent legislators experience tangible benefits or costs with respect to other aspects of position taking (e.g., floor addresses, public speeches, press releases)? How might legislators attempt to explain away controversial positions to their constituents when they are campaigning for reelection? Also, how effective are experienced challengers at using incumbents' position taking behavior against them in subsequent electoral contests? By focusing on these and related questions, I hope to further enhance our understanding of the representational connection between incumbent legislators and their constituents.

CHAPTER 4

THE IMPACT OF LEGISLATIVE BEHAVIOR ON CANDIDATE COMPETITION IN HOUSE AND SENATE ELECTIONS: A STRATEGIC CHOICE ANALYSIS

On August 5, 1993, the U.S. House of Representatives voted upon one of the most important proposals offered by President Bill Clinton in his first year of office—a five-year, \$492-billion deficit reduction package. With time running out on the vote and a 216-216 tie displayed on the House scoreboard, the Democratic leadership turned to first-term Representative Marjorie Margolies-Mezvinsky (D-Pa.), one of the only remaining legislators who had yet to vote. In the previous election, Margolies-Mezvinsky had won by a narrow margin of 1,373 votes from her suburban Philadelphia district, the first Democrat to be elected in that seat during the past 76 years. As a staunch opponent to tax increases, she had initially voted against Clinton's proposal due to the precariousness of her electoral circumstances, but finally acquiesced on final passage given the pressure placed upon her and the pivotal nature of the vote. While her support on the vote was crucial to President Clinton and the party leadership, in the end it cost her reelection in 1994 when an experienced Republican candidate emerged to challenge her resulting in her defeat by a margin of 8,000 votes (Loomis 1999: 2-3).

The preceding example illustrates how a vote taken on the House or Senate floor can have serious ramifications for an incumbent seeking reelection. While it is rare for a single vote to have such noticeable consequences for an incumbent legislator in the contemporary era, the outcome is not a complete surprise given the enormous degree of visibility afforded the vote and the underlying competitiveness of the district. Generally speaking, incumbent legislators face little difficulty in getting reelected since they have

access to considerable resources, can run on their legislative accomplishments, and often do not face a quality challenger (Erikson 1971a; Mann and Wolfinger 1980; Cox and Katz 1996; Erikson and Wright 2000, 2001). Nevertheless, if incumbent legislators begin expressing positions on roll calls out of touch with their constituencies, they may be more likely to attract the attention of an experienced challenger. Moreover, if an experienced candidate decides to enter the race, it becomes considerably more difficult for the incumbent to get reelected (see Jacobson 2001).

Extant research tells us that candidates with prior electoral experience are more likely to run when an incumbent retires, is involved in a political scandal, or won the previous election by a narrow electoral margin (see Jacobson and Kernell 1983, Jacobson 1989, Banks and Kiewiet 1989, Kazee 1994, Maisel and Stone 1997, Welch and Hibbing 1997, Gaddie and Bullock 2000). Building upon these findings, I examine the extent to which incumbents support their party's majority on key roll call votes affects the strategic emergence of quality challengers in a given election. In other words, are experienced challengers more likely to run in response to the positions incumbents take on prominent or salient roll calls? Using House and Senate elections data from the mid-1970s to the present, I systematically examine this question in this chapter.

Prior research suggests that experienced candidates act strategically in response to anticipated behavior on the part of incumbent legislators. At the same time, the choice by a candidate to challenge an incumbent could impact the likelihood that a legislator seeks reelection (Gates and Humes 1997). Thus, it is important to model this behavior as a sequential process, with the challenger moving first and the incumbent responding to this initial move. Given this consideration, it is reasonable to assume that some of the same

factors influencing whether a quality candidate enters might also *indirectly* influence the decision of an incumbent to run again or voluntarily retire. That being the case, it is necessary to consider how factors influencing these processes may be interrelated. If we examine these processes separately, we run the risk of model misspecification resulting from a possible *selection effect*.³⁸ Analyzing this relationship jointly with a selection model provides an opportunity to statistically control for sample selection bias, thus avoiding potential threats to statistical inference.

The issue of candidate competition is further complicated by the fact that there is more than one actor involved in this sequential process and each is operating within a strategic context. When two or more actors are engaged in a strategic interaction under uncertainty, it is important and necessary to model such strategic behavior appropriately. If we ignore the strategic dimension to the interaction between the challenger and the incumbent, then we increase the probability of introducing bias into our results. Indeed, Signorino (2002) has demonstrated that parameter estimates from a standard selection model will be biased if the dependent variable we are trying to explain is generated by strategic interaction among the players. To fully capture the strategic nature of the decision calculus involved with challenging an incumbent, this analysis tests hypotheses derived from a game theoretic model and a test of the model using STRAT, a program for analyzing statistical strategic models developed by Signorino (2001).

This chapter is organized as follows. After reviewing the theoretical literature on candidate competition in congressional elections, I discuss the motivations for employing

³⁸ A selection effect can occur when actors select or are selected into a particular situation by a strategic process, but the interaction between the actors is assumed to be random. Failing to control for a potential selection effect can lead to selection bias in the estimation of an empirical model. For a more extensive discussion of the impact of selection effects, see Heckman 1979; Achen 1986; Signorino 1999; Reed 2000.

a strategic choice model in the context of this research question. From there, I formulate hypotheses and empirical tests of factors influencing the strategic interaction between challengers and incumbents. Next, I compare the results generated from the strategic probit model to those obtained from a standard probit model to show how the latter are affected by selection bias. The concluding section summarizes the principal implications of the findings.

Theories of Competition and Candidate Emergence in Congressional Elections

Scholars interested in candidate competition in congressional elections have spent considerable energy examining the issue in question and have approached the topic from a variety of perspectives. While several early studies redirected attention away from an exclusive emphasis on the incumbent to focus on the role of the challenger in explaining election outcomes (see, e.g., Mann 1978; Mann and Wolfinger 1980; Hinckley 1980a, 1980b), Kazee (1980, 1983) was among the first to study various conditions under which candidates chose to emerge in House races.³⁹ Drawing upon interviews with individual candidates, Kazee (1980) found that many candidates ran for Congress simply for the experience or joy of running for office. In his subsequent work, Kazee (1983) confirmed that incumbency regularly served as an effective deterrent to potential challengers from emerging in congressional races.

In their now classic study of challenger emergence, Jacobson and Kernell (1983) examine whether political candidates exhibit strategic behavior in deciding whether or not to seek office. Through an examination of aggregate patterns of candidates' career

³⁹ For a general discussion of ambition theory that examines the *motivations* for why individuals choose to run for office or make a career out of politics, see Schlesinger (1966), Rohde (1979), and Abramson, Aldrich, and Rohde (1987).

decisions, they speculate as to the underlying motivations for politicians' behavior. As their theory is premised on rational calculations, they argue that experienced candidates are more likely to run for the House when national and partisan conditions are more favorable in terms of their likelihood of success. Jacobson and Kernell test their theory of strategic behavior on data from the 1974, 1980, and 1982 congressional elections and find convincing evidence in support of their hypotheses concerning strategic politicians. Not only do they conclude that experienced challengers wait until circumstances are optimal before they decide to run, they also find that strategic politicians play a pivotal role in determining the results of both district-level elections and the overall partisan composition of Congress.⁴⁰

Jacobson (1989) offers additional support for the strategic politicians theory by testing it against elections data from 1946 to 1986. Through his examination of elections data during this 40-year period, he finds that experienced challengers do not emerge arbitrarily. Rather, their likelihood of running varies with their perceived chance of winning (775). Indeed, Jacobson concludes that a greater proportion of experienced or quality candidates emerge when prospects appear favorable to their party. As a result, he argues that strategic decisions by congressional candidates, based on factors such as likelihood of victory, value of the seat, and opportunity costs, both reflect and enhance national partisan tides. In support of his contention that experienced politicians act strategically, he recognizes that quality challengers are more likely to emerge when a seat is uncontested and they rely increasingly on an incumbent's prior margin of victory as an important cue in deciding whether or not to run (Jacobson 1989: 778).

⁴⁰ For critiques and extensions of the Jacobson-Kernell strategic politicians hypothesis in the context of House races, see Bianco (1984), Bond, Covington, and Fleisher (1985), and Born (1986).

In an attempt to further discern challengers' motivations in running for Congress, Banks and Kiewiet (1989) examine an interesting puzzle regarding the behavior of non-experienced or weak candidates who emerge to challenge incumbents. While they agree with Jacobson and Kernell (1983) concerning the deterrent effects of incumbency with respect to the emergence of experienced challengers, they seek to understand why incumbency does not have the same effect on weak challengers; as they point out, nearly all incumbents are challenged from one election to the next, usually by candidates lacking electoral or political experience. Through their analysis of congressional primary data from 1980 through 1984, Banks and Kiewiet conclude that weak challengers run against incumbents for the same reason that strong challengers are more likely to run in open seat contests—to maximize their probability of getting elected to Congress (1002).⁴¹ Even though their chances of defeat in the fall election are high, political amateurs recognize that running against an incumbent affords them the best opportunity to win their party's nomination, especially since more experienced challengers are likely to stay out of the race absent favorable national or partisan conditions.

Beyond these comprehensive and influential studies of challenger emergence in House races, other scholars have employed case study methodology to better understand candidates' motivations in running for Congress. Fowler and McClure (1989) examine the behavior of candidates that chose to run and those that did not emerge in New York's 30th district in the 1984 election to draw a distinction between individual motivations. In

⁴¹ For an alternative perspective regarding political amateurs' motivation for running for Congress, see Canon (1990, 1993). In brief, Canon argues that amateurs would be better off running in open seat contests since they actually do *not* maximize their chances of winning by running against incumbents. Canon (1993: 1130-1138) adds that to fully understand why inexperienced candidates challenge "safe" incumbents, it is necessary for scholars to distinguish between experience-seeking amateurs and ambitious amateurs.

a series of collected essays, Kazee (1994) presents the work of authors who studied nine congressional districts during the 1991-1992 election cycle in an attempt to identify why some candidates chose to run for Congress while others preferred to stay on the sidelines. More recently, Maisel and Stone (1997) have employed an innovative analysis that seeks to identify potential candidates across the country in an attempt to ascertain what factors influence their decision calculus concerning whether or not to emerge in congressional races. As with earlier studies, Maisel and Stone find that potential candidates' decisions about emergence are most directly influenced by their perceived chance of success.

What factors do potential candidates consider when evaluating the likelihood of running a successful campaign? Jacobson and Kernell (1983) and Jacobson (1989) have systematically shown that the incumbent's margin of victory in the previous election and the underlying political preferences of the district are important factors in influencing a potential challenger's decision calculus. The decision by an incumbent to forgo another term in office is also an issue of consequence for candidates as evidence suggests that experienced or quality candidates are more likely to emerge in open seat contests, thus increasing the level of competitiveness of these races (Bianco 1984; Jacobson 1989; Banks and Kiewiet 1989; Squire 1989a; Wrighton and Squire 1997; Gaddie and Bullock 2000). The involvement of an incumbent in a scandal could also persuade experienced candidates to run given their perceptions of victory would be higher against a legislator viewed as vulnerable or even prone to retire (Peters and Welch 1980; Groseclose and Krehbiel 1994; Jacobson and Dimock 1994; Welch and Hibbing 1997).

An additional factor that has received widespread attention in the literature on candidate emergence is the influence of campaign money on challengers' entry decisions.

As is often the case, however, there is considerable disagreement over the precise effects of campaign spending on candidate emergence. On one side of the debate, Goldenberg, Traugott, and Baumgartner (1986) found evidence that preemptive fund-raising by the incumbent may deter strong challengers from entering a race. Similarly, Goidel and Gross (1994), Hersch and McDougall (1994) and Box-Steffensmeier (1996) concluded that campaign war chests affect the entry decisions of experienced challengers. More specifically, they found that incumbents are usually successful in “scaring off” potential challengers by raising large war chests early in their election campaign.

The previous results notwithstanding, other scholars argue that fundraising efforts and the accumulation of campaign war chests have virtually no effect on entry decisions. In their study of House races from 1972 to 1980, Krasno and Green (1988) conclude that preemptive spending by the incumbent has little effect on candidate emergence when compared with local conditions in the district. Epstein and Zensky (1995) employ a signaling model to evaluate the extent to which incumbent fundraising deters quality challengers from entering a race. While they find that the amount of money raised by the incumbent can convey information to a potential challenger, they also argue that it does not deter quality challengers from emerging since the two factors are virtually unrelated (296). Recently, Goodliffe (2001) has considered the impact of campaign fundraising in House elections while controlling for selection effects and reached the conclusion that legislators’ war chests do not deter quality candidates from challenging incumbents (see also Milyo 1998; Ansolabehere and Snyder 2000).

While the preceding discussion has focused exclusively on candidate emergence in U.S. House elections, this is not meant to suggest that this issue has been ignored in the

context of Senate elections. Many scholars have noted the increased competitiveness of Senate races, due largely to the greater proportion of experienced challengers who run for seats in a given election year (see, e.g., Abramowitz 1988; Squire 1989b; Westlye 1991; Abramowitz and Segal 1992; Krasno 1994). To test the applicability of Jacobson and Kernell's theory outside of its original laboratory, Lublin (1994) evaluates the strategic politicians hypothesis in the context of the Senate and finds that potential challengers consider both local and national conditions when deciding whether or not to emerge in Senate contests. In exploring the impact of fundraising on candidate emergence in Senate elections, Squire (1991) found that money raised by the incumbent does not discourage experienced challengers from emerging. Moreover, research on the Senate conducted by Oppenheimer (1996) and Lee and Oppenheimer (1999) has shown that the size of a state's population directly impacts the nature of senator-constituency linkages and the relative competitiveness of the Senate election.⁴²

Since experienced candidates are more likely to run when an incumbent decides not to seek reelection, it is important to consider factors that influence an incumbent's decision calculus in exploring the central issue of candidate competition. If we assume that reelection is an important objective for legislators (Mayhew 1974a), then the reasons for voluntary retirement must be sufficient to deter incumbents from seeking another term in office. Frantzich (1978) examined the issue of voluntary retirements among House members and found that many willingly chose to leave because they became disaffected by their service in Congress. Following up on this study, Hibbing (1982a) found that a greater percentage of incumbents chose to retire in the 1970s as a result of institutional

⁴² This finding is related to that of Hibbing and Brandes (1983) who found that senators from heavily populated states enjoy less of an incumbency advantage than those coming from sparsely populated states.

reforms implemented in the House.⁴³ Hibbing (1982b) later discovered that monetary compensation and advancement within the committee system also played a central role in influencing incumbents' decisions concerning retirement (see also Hibbing 1991).

In investigating the impact of political scandal on incumbent behavior, Groseclose and Krehbiel (1994) and Jacobson and Dimock (1994) found that legislators involved in the House banking scandal were significantly more likely to retire than seek reelection in 1992. While the opportunity to personally profit from their accumulated war chests also influenced their decision calculus, both groups of scholars concluded that the risks of losing the next election far outweighed the potential benefits of serving another term in Congress. By and large, this pattern of activity corresponds with other studies of congressional behavior, which concluded that members involved in personal or political scandals suffered a significant decline in their vote margin in the subsequent election if they chose not to retire (Peters and Welch 1980; Welch and Hibbing 1997).

A few additional studies of incumbent behavior have enhanced our understanding of factors influencing legislators' decisions to seek reelection or retire from Congress. In their analysis of career decisions from 1947 to 1986, Kiewiet and Zeng (1993) found that members facing the prospect of running in a redrawn district were significantly more likely to run for higher office if an opportunity presented itself.⁴⁴ In fact, they concluded that incumbents only chose to retire if they lacked such an opportunity. Hall and Van Houweling (1995) examine the 1991-1992 election cycle and conclude that legislators

⁴³ Hibbing (1982a) also found evidence that incumbents with ideologically extreme positions on legislation were more likely to retire voluntarily from the House than were more moderate members.

⁴⁴ Box-Steffensmeier and Jones (1997) also consider the role of redistricting in incumbents' decisions to retire from the House as well as the impact of serving in the minority party. As they argue, members of the disadvantaged party should be more likely to retire given their limited opportunities to influence policy outcomes in the House.

positioned to exert influence in the legislative process (e.g., committee chairs and party leaders) are less likely to retire from the House. They also found that electoral insecurity plays a critical role in influencing members of Congress to retire. In a recent study of voluntary departures from Congress, Moore and Hibbing (1998: 1105) concluded that incumbents who feel constrained in their opportunity to achieve their objectives are significantly more likely to turn down a chance to serve another term in the House.

With few exceptions, prior congressional research has focused on questions of candidate emergence or incumbents' career decisions independently, without considering the interrelationship between the actors' decision calculus. While we are beginning to recognize that experienced candidates are more likely to run when an incumbent decides not to seek reelection, less attention has been given to the impact of challengers' strategic behavior on incumbents' career decisions. Jacobson and Kernell (1983: 49), for instance, conclude that "given the remarkable ease with which most [incumbents] win reelection, few retirees during any given Congress are likely to be driven from office by the specter of defeat." In their analysis of relationships between House incumbents and challengers, Ragsdale and Cook (1987) contend that incumbents and challengers behave in ways relatively independent of one another, rather than basing their decisions on the actions or behavior of their opponents.

One important consideration that previous studies overlook, however, is that incumbents may also behave strategically in response to either anticipated or observed behavior on the part of an experienced candidate. Rather than risk losing in a tough reelection campaign, incumbents may opt out of the legislative game in response to the emergence of an experienced challenger. Indeed, Gates and Humes (1997) consider this

very scenario when they analyze strategic behavior on the part of both challengers and incumbents through the lens of a game theoretic model. While they confirm the belief that experienced challengers may decide not to emerge due to the apparent invulnerability of an incumbent, they also conclude that “incumbents may choose to leave office because of a potential challenger” (Gates and Humes 1997: 77). As further evidence in support of this claim, Jacobson (2001: 154) offers the following disclaimer based on his analysis of congressional elections: “Incumbents of the disadvantaged party are marginally more likely to retire when facing the prospect of a tougher-than-usual campaign; the struggle for one more term may not be worth the effort.”

A Unified Strategic Interaction Model

The above discussion lends additional support to the view that the decision by an experienced candidate to challenge an incumbent may impact the choice of a legislator to run for reelection or retire. As a result, it is important to consider how factors influencing these processes may be related. If we suspect that the two processes are interrelated, but fail to control for it in our analysis, we risk introducing selection bias into our estimates (Heckman 1979). When two processes are related but estimated separately, correlation between the disturbance terms can produce inconsistent or inefficient estimates resulting from a selection effect. To statistically control for selection bias, it becomes necessary to incorporate the sample selection into the statistical model to avoid biasing the inferences.

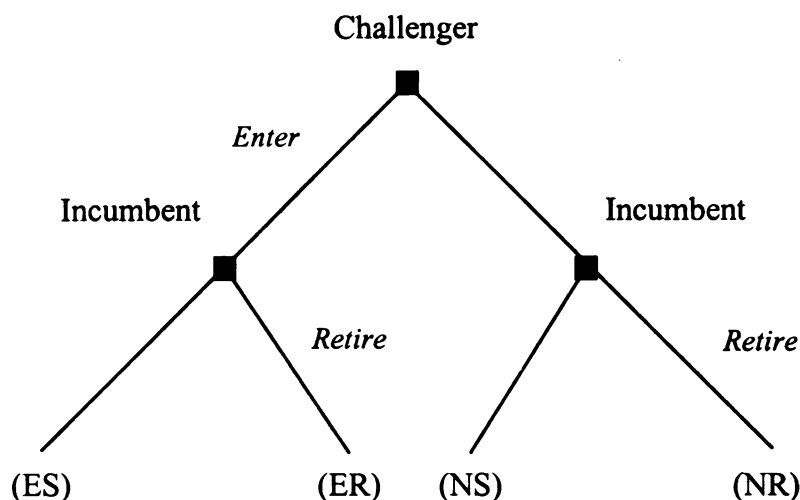
Since experienced candidates decide to challenge incumbents in certain instances and not others, case selection is an important factor to consider statistically in analyses that examine candidate emergence in congressional elections. In the terminology of the

selection literature, an experienced candidate's decision to enter a race or stay out selects the incumbent into the sub-sample where the incumbent must decide whether or not to seek reelection. If candidates choose not to emerge in a given race, their actions can be considered as nonevents. However, if we fail to systematically examine why prospective challengers decide *not* to run in certain races, we risk missing the underlying motivations for their behavior. Perhaps experienced candidates choose not to emerge because they suspect their likelihood of winning is relatively small. Or, they may find it difficult to raise the amount of money necessary to unseat an incumbent and hence, decide to stay out of the race. Regardless of their reasoning, one can only begin to understand candidate behavior by examining *both* events and nonevents.

If there are two or more actors involved in a decision calculus, then it is important to understand the role of strategic interaction in the underlying selection process. Figure 1a depicts a typical situation in which an experienced challenger makes the first move by deciding whether or not to run against the incumbent. In considering this binary choice, likely challengers condition their behavior on the anticipated reaction of the incumbent since legislators generally have a large advantage in winning reelection. If they suspect that an incumbent may opt for retirement instead of face a tough reelection campaign, however, they may be more likely to emerge in a given race. Likewise, incumbents do not need to make a choice about whether to seek reelection absent a challenge from an experienced candidate, unless they have already decided to retire for altogether different reasons. As a result, decisions by both an experienced challenger and an incumbent in this scenario are predicated upon strategic considerations.⁴⁵

⁴⁵ One should note that regardless of which actor moves first in the game described above, the same four outcomes occur when the theoretical model is estimated statistically: (Enter, Run), (Enter, Not Run), (Not

Figure 1a – Strategic Interaction Between Challengers and Incumbents



As Figure 1a illustrates, experienced candidates have two available choices: they can enter the race (E) or they can stay out of the race (N) and make it significantly easier for an incumbent to get reelected. In deciding whether or not to run, strategic politicians obviously consider a number of relevant factors in their utility calculation. If experienced challengers anticipate that an incumbent will decide to seek reelection, they will consider the incumbent's previous vote margin, the partisan characteristics of the constituency, the voting behavior of the incumbent, and the legislator's fundraising ability before making a decision. If they believe or strongly suspect that an incumbent will not seek reelection, they should be more likely to emerge since this situation would significantly enhance their prospects of success.

Enter, Run), (Not Enter, Not Run). Nevertheless, I model the strategic interaction with the challenger moving first without loss of generality since the challenger is often looking ahead on the game tree in an attempt to predict what the incumbent will do. I recognize that the real world situation is much more complex than is depicted in Figure 1. However, I utilize this simplified model to begin to identify and understand the factors that influence the strategic calculus of incumbents and challengers in congressional races.

Once the challenger decides whether to enter a race, incumbents must choose to seek reelection (S) or retire (R). Absent a challenge from an experienced candidate, incumbents are in a better position to get reelected since they will be facing a political novice in the general election (or no one at all). If an experienced candidate does decide to run, however, incumbents must weigh a number of different factors in their utility calculations. In particular, they must consider their position in the chamber, their tenure in office, involvement in a personal or political scandal, their relationship with their constituency, and their overall voting record before making a decision. If the potential costs associated with running are too high, then we should expect incumbents to be more likely to voluntarily exit the chamber.

While the model of candidate emergence above implies strategic interaction on the part of both the challenger and the incumbent, questions remain concerning how to capture empirically the strategic interdependence illustrated by the theoretical model. In an attempt to address this issue methodologically, Signorino (1999, 2002) has developed a statistical discrete choice model derived from McKelvey and Palfrey's (1995, 1996, 1998) work on statistical equilibrium concepts for extensive form games that integrates the underlying strategic dimension among the various actors. This strategic probit model, as Signorino refers to it, combines elements of the strategic interaction in the selection process by translating theoretical choice models into statistical tests.

In calculating the utilities for the actors involved in the model, the payoff for each actor is comprised of two parts: an observable component and a private or unobservable component. As Signorino (2002) contends, including a private component in the analysis accounts for limitations encountered by the analyst in specifying the players' utilities or

by the actors themselves in evaluating the player's preferences over outcomes. Since the possibility for error exists in each of these situations, inclusion of the private component minimizes the impact of this error in estimating actors' utilities. Likewise, "if we assume that the distribution of the private component is known to all players and is independently and identically distributed, $N(0, \sigma^2)$, then the theoretical model can be translated into a statistical model" (Leblang 2001: 14).

Returning to the previous example, the players' actions lead to the four outcomes displayed in Figure 1a: quality challenger enters, incumbent seeks reelection (ES); quality challenger enters, incumbent retires (ER); quality challenger stays out, incumbent seeks reelection (NS); quality challenger stays out, incumbent retires (NR). Now, the players' actual utilities for these outcomes are represented by $U_C(ES)$, $U_C(ER)$, $U_C(NS)$, and $U_C(NR)$ for the challenger and $U_I(ES)$, $U_I(ER)$, $U_I(NS)$, and $U_I(NR)$ for the incumbent. Since neither the actors involved nor the analyst can assume perfectly observable utilities as mentioned above, I assume that private information enters the players' choice probabilities presented below. This private information is represented by π (the random error component) for each actor's utilities.

In further assuming the random error component is independently and identically distributed normal (and this distribution is known to each player), then we need only calculate the equilibrium choice probabilities for each actor (since the interaction in Figure 1a is also probabilistic) as well as the strategic equilibrium outcome probabilities before estimating the statistical model. To begin, the equilibrium choice probability b that the incumbent decides to retire when an experienced challenger emerges would be represented as follows (where Φ is the standard Normal cumulative distribution):

$$\begin{aligned}
b &= \Pr[U_I(ER) + \pi_R > U_I(ES) + \pi_S] \\
&= \Pr[\pi_S - \pi_R < U_I(ER) - U_I(ES)] \\
b &= \Phi \left[\frac{U_I(ER) - U_I(ES)}{\sqrt{(\sigma_{\pi_{ES}}^2 + \sigma_{\pi_{ER}}^2)}} \right]
\end{aligned}$$

It can also be shown that the probability that the incumbent retires when an experienced challenger does not enter, d , is as follows:

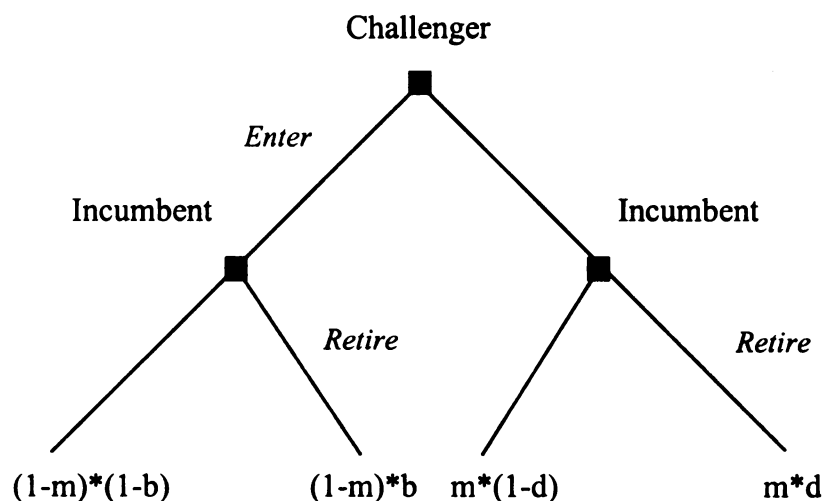
$$\begin{aligned}
d &= \Pr[U_I(NR) + \pi_R > U_I(NS) + \pi_S] \\
&= \Pr[\pi_S - \pi_R < U_I(NR) - U_I(NS)] \\
d &= \Phi \left[\frac{U_I(NR) - U_I(NS)}{\sqrt{(\sigma_{\pi_{NS}}^2 + \sigma_{\pi_{NR}}^2)}} \right]
\end{aligned}$$

In a similar fashion, we can find the equilibrium choice probabilities for an experienced challenger. As before, the challenger's true utility for either entering or not entering a race has both an observable and a private component. Assuming that this random error component is IID Normal, then the probability m of a challenger not entering would be as follows:

$$\begin{aligned}
m &= \Pr[U_C(N) + \pi_N > U_C(E) + \pi_E] \\
&= \Pr[\pi_E - \pi_N < U_C(N) - U_C(E)] \\
&= \Pr[\pi_E - \pi_N < dU_C(NR) + (1-d)U_C(NS) - bU_C(ER) + (1-b)U_C(ES)] \\
m &= \Phi \left[\frac{dU_C(NR) + (1-d)U_C(NS) - bU_C(ER) + (1-b)U_C(ES)}{\sqrt{\sigma_{\pi_N}^2 + \sigma_{\pi_E}^2}} \right]
\end{aligned}$$

When we multiply the equilibrium choice probabilities for all combinations of the two actors, we obtain the requisite equilibrium outcome probabilities as illustrated in Figure 1b. Specifically, the probability of a challenger entering and an incumbent seeking reelection (ES) is $(1-m)*(1-b)$. The probability of a challenger entering and an incumbent retiring (ER) is $(1-m)*b$. The probability of a challenger not entering and an incumbent seeking reelection (NS) is $m*(1-d)$. Lastly, the probability of a challenger not entering and an incumbent retiring (NR) is $m*d$. Since these outcome probabilities are functions of a set of explanatory variables and their parameters, it is possible to obtain maximum likelihood estimates with respect to the parameters using the STRAT program.

Figure 1b –Equilibrium Outcome Probabilities



What advantages does using a strategic choice technique have over a traditional selection model in analyses of candidate competition? First, this model recognizes the sequential nature of the choices offered to the actors involved and incorporates strategic

interaction into the selection process. Once a candidate decides to emerge, the decision self-selects the incumbent into the subsample where a strategic choice must be made to seek reelection or retire. Also, a strategic choice model accommodates the complexities of estimating a selection model where there are two or more actors involved (Signorino 2002). While strategic models are inherently selection models, the latter cannot account for the strategic interdependence among players, which can result in biased estimates if improperly applied. Indeed, failing to model the strategic interaction between two or more actors can lead to a form of misspecification far worse than failing to account for selection bias resulting from correlated disturbances (Signorino 2002).

An alternative strategy for examining candidate emergence in congressional elections is to employ a maximum likelihood estimation technique such as multinomial logit where three or more outcomes are estimated simultaneously. This technique is inappropriate for examining this particular question, however, both because it imposes the property of independence of irrelevant alternatives (IIA) on the choices available to the actors (Alvarez and Nagler 1998) and it ignores the sequential nature of the choice made by the challenger and the incumbent. Multinomial probit, which does not suffer from the restrictiveness of the IIA assumption, also is unsuitable, as it does not allow for the sequential nature of the decision process. Only an estimation technique that both controls for sample selection bias and recognizes the strategic dimension to the choices available to the actors will minimize the risk of model misspecification. In sum, then, a strategic choice model addresses these methodological concerns by accounting for the strategic interaction between actors and treating the decision calculus of challengers and incumbents as a sequential process.

Data, Hypotheses, and Methods

To evaluate the extent to which position taking on key votes in the House and the Senate impacts the emergence of experienced challengers, I go beyond existing models in the extant literature by including a large sample of roll call votes. In particular, I examine the effects of *Congressional Quarterly* (CQ) “key votes” from 1975-2000 in the House and Senate to ascertain whether the positions incumbents express on prominent roll call votes affect the decision calculus of experienced challengers. These roll calls are selected on the basis of whether the issue at question involves a degree of controversy, is a matter of political or presidential power, and has the potential to significantly impact the lives of Americans. Ultimately, if experienced candidates are attuned to the position taking behavior of incumbent legislators on these votes, then we should expect candidates to behave strategically by emerging in those congressional races where incumbents take positions that diverge from the interests of their constituencies.

In departing from traditional approaches employed in earlier studies of candidate emergence, I employ a strategic probit model that captures the strategic interdependence in both challenger and incumbent behavior. By utilizing a strategic choice model, I can avoid potential problems associated with selection bias given the sequential nature of the decision calculus as well as control for the strategic element associated with interaction by two or more actors under uncertainty. This model also allows me to incorporate factors influencing challenger emergence into the model while simultaneously controlling for variables affecting an incumbent’s decision to seek reelection or retire. Maximum likelihood estimates for the parameters, standard errors, and predicted probabilities as reported in Tables 20 and 21 are calculated using STRAT.

The dependent variables for the strategic choice analysis are the four outcomes for the model presented in Figure 1a: (ES), (ER), (NS) and (NR). Given the emphasis in this paper on the influence of incumbents' roll call behavior on candidate emergence, the central explanatory variable is essentially each legislator's party unity score on selected key votes. In other words, this is the percentage of time incumbents support the position taken by a majority of their party on key roll call votes (see, e.g., Canes-Wrone, Brady, and Cogan 2002).⁴⁶ This variable is continuous as it is computed as a proportion ranging from 0 (no support for the party) to 1 (absolute support for the party). To isolate the effects of legislators' voting across key votes on challenger emergence, I control for a number of factors hypothesized to influence candidates' entry decisions.

Jacobson and Kernell (1983) and Jacobson (1989) demonstrate that a legislator's electoral security in the previous election and the partisanship of the district are central factors in determining whether or not an experienced candidate emerges to challenge an incumbent.⁴⁷ Accordingly, I control for each of these variables in this analysis. The incumbents' electoral security is coded as the percentage of the two-party vote each legislator received in the previous election. To assess the underlying partisan leanings of the constituency, I include the percentage of the two-party vote the Democratic candidate received in each district/state in the most recent presidential election (subtracted from the national vote) as a proxy for political preferences (see, e.g., Brady, Canes-Wrone, and

⁴⁶ I focus specifically on positions taken on key votes during the first session of each Congress since these are the ones most likely to influence a challenger's decision calculus concerning whether or not to emerge. For the most part, challengers have to make a decision about whether or not to run in a congressional primary early in an election year, preventing votes that take place in the second session from having little, if any impact, on their entry decisions.

⁴⁷ For a variety of reasons (e.g., insufficient or incomplete data, the failure of the STRAT model to converge with the inclusion of additional variables), I do not include economic indicators or presidential approval in the models. In future work, I plan to extend the findings presented here by incorporating such variables in related analyses.

Cogan 2000; Jacobson 2000; Ansolabehere, Snyder, and Stewart 2001).⁴⁸ This variable taps long-term forces such as the partisan composition of the district/state independent of party support for the congressional candidates.

Although it is important to control for the effect of money to ascertain whether it has a deterrent effect on challenger emergence in the context of a strategic choice model, questions remain about how to measure this variable. In examining the deterrent effect of campaign money on candidate emergence, Goodliffe (2001) collects data on the size of an incumbent's war chest on January 1st of odd years and includes this variable in his model. While this operationalization represents one of several alternatives for measuring the impact of money on a challenger's decision calculus, it would perhaps make more sense to collect data on the amount of money in an incumbent's war chest on January 1st of an election year (to reflect fundraising efforts during the previous year). Indeed, it would be ideal to have a record of the amount of money an incumbent currently has on hand prior to the filing deadline when a challenger has to make a decision about whether or not to run in a congressional primary.

As an alternative to the above specifications, I control for the amount of money spent by the incumbent in the previous election to determine whether strong challengers are discouraged from entering a race by an incumbent's past record of spending.⁴⁹ In general, one should expect that a quality candidate would be less likely to enter a race if an incumbent has demonstrated an ability to raise substantially large sums of money to

⁴⁸ For alternative operationalizations of this measure of district/state political preferences, see Abramowitz (1991); Levitt and Snyder (1995); and Ansolabehere, Snyder, and Stewart (2000).

⁴⁹ More specifically, I include the natural logarithm of previous incumbent expenditures to account for potential "scare off" effects. As Jacobson (1980) argues, the advantage of using the natural logarithm of expenditures for empirical analyses of elections is that doing so avoids the assumption of a linear relationship between money and votes, thereby accounting for diminishing returns from campaign spending.

ensure reelection. While such behavior *may* be perceived as a signal of vulnerability, only ambitious, experienced, and well-financed challengers will be in a position to defeat an incumbent who has verified fundraising prowess (Jacobson 2001). Accordingly, I utilize incumbents' past record of spending in the previous electoral cycle as a proxy for their ability to scare off potential strong challengers.

Given that prior research has shown that open seats are strongly competitive due to the greater emergence of experienced challengers (Bianco 1984; Squire 1989a; Gaddie and Bullock 2000), I incorporate this variable into the analysis. Additionally, based on the work of Lee and Oppenheimer (1999), I control for the size of the state population in the analysis of candidate emergence in Senate races. In their discussion of the effects of equal apportionment on Senate elections, Lee and Oppenheimer find that the larger the state's population, the more competitive the election is likely to be. Since this effect seems to imply a higher probability of entry by an experienced challenger(s), I examine whether there is a related connection between population size and candidate emergence resulting from the greater heterogeneity of more populous states.

Turning to factors influencing an incumbent's decision to seek reelection or retire, Hall and Van Houweling (1995) have demonstrated that legislators who are positioned to exert influence in the chamber are significantly less likely to retire from Congress. They also found that as the prospect of electoral security declines, incumbents become more likely to choose retirement over possible defeat.⁵⁰ Following their lead, I include control variables for both status as a party leader and that of committee chair since incumbents

⁵⁰ The inclusion of the incumbents' previous vote margin and the democratic presidential vote share at the district/state level will allow me to test the veracity of this claim in conjunction with incumbents' strategic career choices.

holding such positions should be less likely to retire, all else being equal.⁵¹ To examine possible career effects while also accounting for diminishing marginal returns associated with length of service in Congress, I include a squared term for seniority. Incorporating this variable into the model tests for the occurrence of “incumbency fatigue,” whereby constituents become less supportive of legislators the longer they remain in office (Lin and Guillen 1999).

Following up on the work of Kiewiet and Zeng (1993) and Box-Steffensmeier and Jones (1997), I also include a variable indicating whether a representative’s district in the House was redrawn following the decennial census and subsequent reapportionment of House seats. Districts that were substantially redrawn after the census were coded as a 1 while others were coded 0.⁵² Since Box-Steffensmeier and Jones (1997) and Jacobson (2001) conclude that members of the minority party are also more likely to retire from Congress given their limited input in the legislative process, I also control for this variable in the analysis. Prior to 1995, Republican members in the House are coded as a 1 while all others are coded as a 0; after 1995, Democrats are coded as a 1 with all others coded as a 0. For the Senate analysis, I control for Republican control of the chamber from 1981-1986 and 1995-2001 (in all other cases, they are coded as the minority party).

Additionally, I control for incumbents’ general voting tendencies as reflected by their first dimension DW-NOMINATE scores (see, e.g., Poole and Rosenthal 1997). These

⁵¹ Most of this information was coded from Nelson’s (1993) volume outlining committee jurisdictions and member rosters and supplemented with information from the Office of the Clerk for the U.S. House of Representatives for more recent Congresses. The web site for the House Clerk can be accessed at: <http://clerkweb.house.gov>. While it would also be useful to explore the effects of subcommittee chair status or the prospect of becoming a committee chair in the subsequent Congress on incumbent retirement decisions, I lack suitable data to examine the effects of these factors more systematically. Such issues are ripe for future analysis, however, and will be examined when such data become more readily available.

⁵² This coding includes districts that were redrawn later in the decade as a result of judicial decisions striking down existing district boundaries as unconstitutional.

scores, constructed via scaling techniques that use legislators' entire roll call records to measure ideology, provide summary statistics of legislators' overall voting tendencies on the traditional liberal-conservative economic dimension. DW-NOMINATE scores range from -1 to 1, with low scores indicating policy liberalism and high scores indicating policy conservatism. By including the *absolute value* of this variable in the model, I seek to control for the legislator's general ideological reputation and, in turn, evaluate the extent to which members who adopt ideologically extreme positions on legislation are more likely to retire.

One final variable that I attempt to control for is the involvement of the incumbent in a personal or political scandal and its observable effects in terms of challenger entry decisions and legislative retirements. While I lack suitable data on political scandals in the House, I have been able to incorporate data on political scandals in the Senate. All else being equal, we should expect an incumbent mired in a political scandal to be more likely to retire, especially as the seriousness of the charges increase (Welch and Hibbing 1997). An incumbent's involvement in a scandal may also encourage more experienced challengers to emerge in a given race, thus further increasing the likelihood of defeat for an incumbent who chooses to seek reelection.

Empirical Results

Table 20 presents estimates for the strategic probit model examining challenger and incumbent behavior in U.S. House elections.⁵³ The columns in Table 20 correspond

⁵³ Since the samples in this analysis consist of pooled, cross-sectional data, it is important to consider the possibility of serial correlation within the estimates. To control for this potential issue, I included a series of fixed effects (i.e., congress-specific dummies) with the estimation of each of the models. At no time

to each of the outcomes for the two players (challenger and incumbent) as identified in Figure 1a. Cell entries are maximum likelihood estimates with robust standard errors in parentheses. Predicted probabilities are denoted in the last column (ΔP) of the table and are interpreted in the same manner as with any maximum likelihood model. One should note that the challenger's utility for not emerging and the incumbent's utility for seeking reelection are represented by constants to avoid problems associated with identification.⁵⁴

As anticipated, the model yields a number of substantively interesting findings. First, the hypothesis regarding the impact of party support on the subset of votes included in the analysis is supported by the findings, as the coefficient on this variable is both positive and significant. The higher the proportion among incumbents on the party support index for key votes, the greater likelihood an experienced candidate emerges to challenge a legislator. In probabilistic terms, for every percentage increase in the incumbent's support of the majority of their party's position, an experienced candidate's likelihood of entering increases by nearly two percent. While this effect is small, this finding is important as it confirms the expectation that strategic politicians do take notice of and run in response to the positions expressed by legislators on prominent legislative issues. It also suggests that members may find it in their best interests at times to defect from their party on salient votes to discourage quality candidates from running against them.⁵⁵

were these variables individually or jointly significant. As a result, the results reported in Tables 1 and 2 do not include fixed effects.

⁵⁴ The STRAT model fails to converge due to problems of identification when the same set of variables are included in more than one set of utilities for a single actor.

⁵⁵ These conclusions are most clearly supported by the tactics employed by Republican challengers in the 1994 congressional elections. In an attempt to associate Democratic legislators with an unpopular

Table 20 – Strategic Choice Model of Competition in House Elections, 1976-2000

Variable	Challenger's Utilities		Incumbent's Utilities		ΔP
	Emerge	Not Emerge	Retire	Seek Reelection	
Constant		5.633 (3.331)		0.678* (0.059)	
Party Index Score on Key Votes	0.388* (0.148)				1.9%
Incumbent Expenditures	-0.048* (0.019)				-2.1%
Previous Incumbent Vote	-0.004* (0.002)				-2.2%
Democratic Pres. Vote Share	-0.019* (0.004)				-5.8%
Open Seat	3.533* (0.142)				50.7%
Minority Party Status			0.112* (0.051)		3.0%
Redistricting			0.206* (0.098)		5.3%
Committee Chair			0.130 (0.100)		3.4%
Party Leader			-0.083 (0.147)		-1.9%
Ideology (DW-Nominate)			0.005 (0.014)		0.2%
Seniority ²			0.003* (0.001)		19.6%
N=5666 Mean log-likelihood = -0.683 * Significant at $p < 0.05$					

Estimates are calculated via the strategic probit model described in the text and implemented in STRAT. Standard errors are in parentheses.

Democratic president, the Republicans ran a series of television advertisements that had the faces of incumbents morphing into the face of President Clinton. Additionally, the advertisements linked members' roll call voting behavior to a number of policy initiatives favored by Clinton in an attempt to publicize their liberal voting tendencies.

The results in Table 20 also indicate that an incumbent's past record of spending does play a significant role in influencing candidates' strategic behavior. The negative sign on the variable suggests that money spent by the incumbent in the previous electoral cycle deters experienced candidates from entering a race in the subsequent election. In particular, the larger the amount of money raised and spent by the incumbent in the previous election, the less likely an experienced challenger is to emerge in the current electoral cycle. This finding is entirely consistent with earlier expectations as it suggests that strategic politicians use an incumbents' fundraising ability in the previous election as a cue in determining whether or not to emerge.⁵⁶ While this result does not directly refute the findings of Goodliffe (2001) and others who fail to find that incumbents' war chests deter quality candidates from entering, it does confirm the existence of a potential "scare off" effect associated with incumbent spending within the context of a strategic choice analysis.

Also noteworthy from the results are the impact of electoral considerations on candidates' entry decisions. In particular, the percentage of the two-party vote the incumbent received in the previous election strongly influences strategic behavior on the part of a potential challenger. The larger an incumbent's previous vote margin, the less likely an experienced candidate is to enter a race, all else equal. Indeed, for every one-percentage increase in an incumbent's previous vote margin, an experienced challenger's likelihood of challenging an incumbent declines by slightly more than two percent. This

⁵⁶ In an alternative specification of this model, I included a control for whether or not the incumbent ran against a quality challenger in the previous election, but this variable was not statistically significant. To a certain extent, this result may explain why experienced challengers are less likely to enter a race when an incumbent spent a large sum of money in the previous election. Even if they had sufficient resources to mount an effective campaign, they might be discouraged from entering the race by the fact that an experienced challenger was unable to defeat the incumbent in the previous election.

is an intuitive finding that serves to confirm Jacobson and Kernell's (1983) argument that strategic politicians use incumbents' electoral security as a signal when deciding whether or not to run. As they conclude, strategic politicians are much less likely to run against a safe incumbent as they realize that their chances of victory are relatively slim against an otherwise popular legislator.

The underlying competitiveness of the district also appears to influence a decision by challenger to enter or stay out of a race. As the share of the Democratic presidential vote margin (subtracted from the national total) in the district increases, experienced candidates become significantly less likely to emerge. Probabilistically, a one percent increase in the Democratic presidential vote share in the congressional district decreases the likelihood of challenger emergence by nearly six percent. Since this variable taps the relative degree of competitiveness of the district, potential challengers become less likely to risk their political futures by challenging an incumbent in a "safe" seat. All else being equal, we should expect to see more experienced candidates emerge in districts that are slightly more competitive as reflected by close presidential contests at the district level.

When it is announced in advance that an incumbent is not seeking reelection, the results indicate that experienced candidates are significantly more likely to decide to run. Indeed, the change in predicted probability reveals that quality challengers are 50 percent more likely to run when there is an open seat than when an incumbent seeks reelection. This finding confirms the conventional wisdom that open seat races tend to be the most competitive (Gaddie and Bullock 2000). Without an incumbent running, experienced politicians realize that this is their best opportunity to get elected to Congress. Not only are they more likely to capture the nomination from their respective party, but they are

also in a better position to raise the money necessary to run an effective campaign against experienced challengers from the opposing party.

Turning to the incumbents' utility for choosing between running for reelection and retiring, the estimates tell an interesting story about strategic behavior. As expected, members of the minority party were more likely to retire from Congress, especially when they faced the prospect of running against an experienced challenger.⁵⁷ This result is quite intuitive as it suggests that members of the disadvantaged party have less incentive to remain in Congress as their opportunities to influence legislation are reduced by their party status. More importantly, the prospect of running against an experienced challenger from the majority party would make the decision to retire even easier since members would rather leave office voluntarily than risk the potential costs associated with defeat.

The results in Table 20 also confirm that redistricting affects incumbent career decisions. The positive sign on this variable indicates that representatives forced to run in a redrawn district are significantly more likely to retire, all else equal. As reflected in probabilistic terms, incumbents are about 5 percent more likely to voluntarily leave office when their district boundaries are altered. By and large, this suggests that incumbents are reluctant to run for reelection when the level of uncertainty increases as to their prospects for success. Not only must they compete in a "new" district, they also run the risk of facing an experienced challenger seeking to capitalize on this turn of events. Moreover, two incumbents may face off against one another in certain instances (when a state loses a congressional seat), thus further increasing the probability that at least one legislator opts for retirement instead of facing a tough reelection campaign.

⁵⁷ Indeed, serving in the minority party increases the probability of retirement among incumbent legislators by approximately 3 percent.

In contrast to the findings reported by Hall and Van Houweling (1995), the party leadership and committee chair variables do not exert an independent and significant effect in the strategic choice model when controlling for other factors. Although the sign on the party leadership variable leads one to believe that members serving in this capacity are less likely to retire from the House, it is impossible to conclude that the effect of this variable is statistically different from zero. Additionally, the sign on the committee chair variable is positive, suggesting that members serving in this capacity are actually *more* likely to retire when faced with the prospect of running against an experienced candidate. Nevertheless, it is difficult to draw definitive conclusions about this variable since it fails to reach conventional levels of statistical significance. What these results do seem to suggest, however, is that members holding leadership positions may cut their losses and decide to retire when the prospect of facing an experienced challenger in the next election becomes reality.

The lack of statistical significance on the first dimension DW-NOMINATE variable also makes it impossible to conclude that the ideology of legislators plays a role in their decision to retire from the House. Although Hibbing (1982a) found that ideologically extreme members were more likely to voluntarily exit the House, this conclusion cannot be confirmed in the strategic choice model when controlling for other factors impacting incumbents' decision calculus. In evaluating the impact of seniority on incumbents' career decisions, the results do support the argument of diminishing marginal returns for legislators the longer they remain in office. While there is a tangible incentive for members of the House to accrue seniority, resulting in better placement in the committee and party leadership structure, incumbents may eventually reach a ceiling whereby they

choose to retire. Whether or not this effect is the result of incumbency “fatigue” remains unclear, but there does appear to be a point when incumbents recognize the benefits of leaving office voluntarily.

U.S. Senate Elections

To facilitate comparisons between House and Senate elections, Table 21 presents the results from a strategic choice model for Senate contests. As we saw with the House, the estimates for the Senate provide several substantively interesting findings regarding candidate competition. Most notably, the hypothesis concerning the impact of party support on key votes in the Senate is also sustained by the findings. Incumbents who frequently vote with a majority of their party on key votes are more likely to face an experienced challenger in the next election, all else equal. For every percentage increase in the incumbent’s support of the majority of their party’s position, the likelihood of strategic challenger emergence increases by 1.9 percent. Thus, even though Senate elections are usually more competitive than House elections, strategic politicians in the Senate do not appear to differ substantially in their propensity to run in response to the positions incumbents express on key votes. Moreover, senators may be advantaged from time to time for defecting from their party on such votes, as it may reduce the likelihood of facing a quality challenger in the future.

Table 21 – Strategic Choice Model of Competition in Senate Elections, 1976-2000

Variable	Challenger's Utilities		Incumbent's Utilities		ΔP
	Emerge	Not Emerge	Retire	Seek Reelection	
Constant		0.5226 (2.2824)		1.136* (0.185)	
Party Index Score on Key Votes	0.023* (0.009)				1.8%
Incumbent Expenditures	0.170 (0.087)				2.6%
Previous Incumbent Vote	-0.066* (0.011)				-4.1%
Democratic Pres. Vote Share	-0.006 (0.010)				-0.1%
Open Seat	2.280* (0.550)				5.7%
State Population (in thousands)	0.004* (0.002)				5.6%
Minority Party Status			0.411* (0.201)		2.5%
Ethics Violation			1.158* (0.586)		4.4%
Committee Chair			0.230 (0.272)		1.8%
Party Leader			0.351 (0.513)		2.3%
Ideology (DW-Nominate)			0.642 (0.762)		1.3%
Seniority ²			0.001 (0.001)		0.1%

N=465

Mean log-likelihood = -1.039

* Significant at $p < 0.05$

Estimates are calculated via the strategic probit model described in the text and implemented in STRAT. Standard errors are in parentheses.

Whereas the amount of money spent by the incumbent legislator in the previous electoral cycle deters the emergence of experienced challengers in House races, the same does not hold for the Senate. Indeed, the results in Table 21 suggest that experienced candidates in Senate races decide to enter irrespective of the amount of money spent by the incumbent in the most recent election. In particular, the variable measuring previous incumbent spending is statistically significant, but the sign on the coefficient is positive rather than negative. This finding confirms the results presented by Squire (1991) and is perhaps best explained by the recognition that experienced candidates who challenge Senate incumbents are typically well connected financially, which helps to increase their chances of winning. As a result, these individuals are less likely to be deterred by the fundraising prowess of an incumbent since they generally have significant resources to draw upon to organize a competitive election campaign (Krasno 1994).

In considering the impact of state population on the propensity for experienced challenger emergence in Senate contests, the estimates indicate a strong relationship between these variables. More specifically, the results suggest that the likelihood of a quality candidate entering a race is directly related to the population of the state. The larger the state's population, the more likely an experienced candidate is to emerge and challenge an incumbent (partly as a function of the greater pool of potential quality challengers in the larger, more populous states). From a candidate's perspective, running in a more populous state is preferred since these states tend to be more heterogeneous, and hence, more competitive. Absent a more homogeneous constituent base, incumbents face a tougher reelection battle in larger and more popular states, especially if they must run against a well-financed and experienced challenger.

As was the case with candidate competition in the House, we also observe that electoral considerations play a role in shaping strategic politicians' behavior in Senate races. In particular, the proportion of the two-party vote incumbent senators received in the previous election is inversely related to the likelihood of an experienced challenger emerging. For every percentage increase in the incumbent's previous vote margin, the likelihood of strategic challenger entry declines by 4 percent. Once again, incumbent popularity and strategic considerations on the part of prospective challengers in Senate races appear to be interrelated. When considering whether or not to challenge a sitting incumbent, prospective challengers rely on incumbents' previous vote margins as an important indicator of vulnerability to evaluate their prospects for success.

While comparatively less attention has been given to the issue of candidate competition in open seats in the context of Senate elections, it should come as no surprise that strategic politicians are more likely to run when an incumbent senator voluntarily exits the chamber. Indeed, the results in Table 21 clearly support this conclusion (albeit somewhat less so than was the case for the House). In most instances, the experienced candidates running for open Senate seats are probably current or former House members who recognize the rarity of the opportunity to win a seat in the upper chamber. Even though these individuals have to give up their seats in the House to run for the Senate, progressively ambitious House members most likely conclude that the risks associated with losing their seats are worth the potential payoff for a position in the Senate.

In contrast to the House, the Democratic share of the presidential vote at the state level does not appear to be statistically related to the emergence of quality candidates in Senate races. While the sign on the variable is in the expected negative direction, it fails

to reach conventional levels of statistical significance when controlling for other factors in the strategic model. This finding is most likely attributable to greater heterogeneity within the states resulting from larger, more diverse populations.

Shifting our attention to the incumbents' utility in opting for retirement versus seeking reelection, the results indicate that senators are more likely to voluntarily exit the chamber when they are in the minority party. Just as we saw with their counterparts in the House, senators in the minority almost certainly feel disadvantaged by their party's status, making the decision to leave the Senate easier—especially when they recognize that they will be facing an experienced challenger in the next election.⁵⁸ Moreover, the results in the table show that senators involved in an ethical scandal or violation are significantly more likely to retire from the chamber. More specifically, senators involved in an ethical violation are approximately 4 percent more likely to retire from the Senate than are other members. Given that senators mired in scandal are more likely to face defeat at the hands of a quality challenger, they recognize the utility of voluntarily leaving the Senate to avoid the uphill battle associated with their reelection campaign.

Similar to the pattern in the House, serving as a party leader or committee chair in the Senate does not deter incumbents from retiring from the Senate. In both instances, the effects of these variables are not statistically different from zero when we control for other factors in the strategic model. More specifically, committee and party leaders do not appear less likely to retire than rank-and-file members when faced with the prospect of a quality challenge in the next election. Furthermore, the variable tapping senators' ideology fails to reach conventional levels of statistical significance, suggesting as before

⁵⁸ While relatively small, senators serving in the minority are 2 percent more likely to retire from the chamber than are their colleagues in the majority.

that ideologically extreme members of the Senate are not necessarily more like to retire than their more moderate colleagues. Finally, we observe that seniority does not exert an independent or significant impact on incumbents' strategic career choices, making it difficult to draw definitive conclusions about the effect of this variable.

Comparing Results From the Strategic Choice Model to a Standard Probit Model

One of the central arguments in this paper is that failing to model the underlying strategic relationship between a challenger and an incumbent leads to biased or inaccurate estimates. To illustrate the validity of this argument, I reran each of the models presented in Tables 20 and 21 with a standard probit technique that is not designed to capture the strategic dimension in each of the actors' utilities. Through a comparison of these results to the original STRAT estimates, I seek to demonstrate exactly the type of bias that can occur when failing to control for strategic behavior on the part of one or both actors. The results from the probit models for both the House and the Senate are reported in Table 22.

A cursory glance at the results in Table 22 reveals several noteworthy findings. First, and perhaps most importantly, the party index score variable is insignificant in the estimates for both the House and the Senate models. In other words, simply estimating the decision by a challenger to emerge in a given congressional race without controlling for strategic interaction would lead one to believe that experienced challengers do *not* pay attention to an incumbents' voting pattern on key votes. To some extent, this finding may help illustrate why other scholars have failed to identify the effect of legislative roll call behavior on candidate emergence in congressional races. Only by estimating this relationship in the context of a strategic choice model, however, do we obtain results that are consistent with the underlying theoretical expectations presented earlier in the paper.

Table 22 – Probit Model of Competition in House & Senate Elections, 1976-2000

Variable	House Elections		Senate Elections	
	Challenger	Incumbent	Challenger	Incumbent
Party Index Score on Key Votes	0.049 (0.145)		0.009 (0.006)	
Incumbent Expenditures	0.053* (0.022)		0.088 (0.069)	
Previous Incumbent Vote	-0.006* (0.001)		-0.037* (0.006)	
Democratic Pres. Vote Share	-0.009* (0.002)		-0.006 (0.008)	
Open Seat	1.969* (0.074)		1.330* (0.422)	
State Population (in thousands)			0.001 (0.001)	
Minority Party Status		0.022 (0.048)		0.084 (0.154)
Redistricting		0.025 (0.059)		
Committee Chair		-0.094 (0.116)		-0.160 (0.206)
Party Leader		-0.529* (0.217)		-0.036 (0.265)
Ideology (DW-Nominate)		-0.387* (0.129)		0.003 (0.368)
Seniority ²		0.001* (0.000)		0.001* (0.000)
Ethics Violation				1.290* (0.419)
Constant	-0.892* (0.298)	-1.293* (0.053)	1.018 (1.124)	-1.072* (0.177)
Log-Likelihood N	-1878.01 4304	-1780.32 5666	-262.81 456	-229.91 465

Estimates are calculated using probit. Standard errors are in parentheses. * Significant at $p < 0.05$

Additionally, the results in Table 22 suggest that the amount of money raised and spent by the House incumbent in the previous electoral cycle does *not* deter experienced candidates from entering. While the expenditures variable is statistically significant, the sign on the variable is positive instead of negative, leading one to believe that the more money spent by the incumbent in the previous election, the *greater* chance that he or she would face an experienced challenger in the subsequent election. As before, this result is opposite that reported in the strategic choice model (for House races) and contrary to the underlying theoretical story in this paper. What makes this finding of particular interest is that it may help shed light on the ongoing debate over the effects of campaign spending on deterring quality challengers from emerging. Without the appropriate control for strategic interaction, one might be falsely led to believe that money raised and spent by the incumbent is not a sufficient condition for deterring challenger entry, even though it actually may be.

Beyond the differences in the probit estimates for the challengers' utilities, one can also observe a number of dissimilarities between the two models when focusing on the incumbents' decisions to seek reelection or retire. The variables indicating minority party status and redistricting are not significant in the probit model for House elections, leading one to infer that these variables do not have a positive effect on an incumbent's decision to retire from the House when forced to run against an experienced challenger. In general, these results are not consistent with the estimates obtained from the strategic choice model nor do they coincide with the theory and evidence presented earlier. Thus, these findings provide further evidence that failing to control for strategic interaction between challengers and incumbents can significantly bias our results.

The estimates in the standard probit model also reveal differences in connection with the variables tapping leadership status in the party and member ideology. Most notably, the variable measuring party leadership status is both negative and significant in the probit model, suggesting that party leaders are less likely to retire, even when they may face an experienced candidate in the upcoming election. While this result may have a certain intuitive appeal, it is not supported by the estimates generated in the context of the strategic choice model. Additionally, the results from the probit model seem to suggest that more ideologically extreme members are less likely to retire when facing a quality challenge. From a purely substantive perspective, this finding is somewhat puzzling since we should generally expect the opposite to be true—the more extreme a member is ideologically, the more likely that incumbent may be to invoke a challenge from an experienced candidate, all else being equal.⁵⁹

Conclusion

The results in this chapter serve to both challenge and confirm several insights in the extant literature on candidate competition in congressional elections. First, I have shown that experienced challengers decide to run in situations other than when legislators exhibit signs of vulnerability or decide to opt out of a tough election campaign. Strategic politicians run against incumbents who increasingly vote with their party on prominent roll calls. This is an important finding as it reveals that there are electoral consequences associated with toeing the party line on key votes.⁶⁰ Moreover, this result confirms the

⁵⁹ This presumes, of course, that the incumbent does not represent an ideologically extreme constituency. In all other cases, we should expect this general principle to hold.

⁶⁰ Mayhew (1974: 99) reaches a similar conclusion in discussing the electoral benefits of position taking. “What is important to each congressman, and vitally so, is that he be free to take positions that serve his

assumption implicit in congressional elections research that candidates are attuned to the position taking behavior of incumbents in both the House and the Senate.

In addition to showing that electoral security and the partisan characteristics of the constituency influence strategic challenger emergence, I also demonstrate that the amount of money raised and spent by the incumbent in the prior election can deter experienced challengers from running. While I am not able to speak directly to the debate concerning deterrent effects of campaign war chests, the results do suggest that strategic politicians can be scared off by an incumbent's ability to raise and spend large sums of campaign money. Moreover, from the perspective of rational choice theory, this finding has a certain intuitive appeal. If we assume that legislators are rational actors and we know that they dislike raising large sums of money, why would they continue to repeat this cycle each election if money had little or no measurable impact on strategic challenger entry?⁶¹ On the other hand, if we assume that legislators do not habitually squander their limited time or scarce resources, then it is reasonable to conclude that they are making rational calculations when raising money for their reelection campaigns.

The results in the preceding models also demonstrate that incumbents' career decisions are influenced by a variety of external and institutional factors. Indeed, serving in the minority party, running in a radically redrawn district, involvement in a political scandal, and length of service in the chamber can all encourage incumbents to retire from

advantage. There is no member of either house who would not be politically injured—or at least who would not think he would be injured—by being made to toe a party line on all policies (unless of course he could determine the party line). There is no congressional bloc whose members have identical position needs across all issues.”

⁶¹ To argue that incumbents raise and spend large sums of money because it has an impact on winning would not be inconsistent with my argument. Indeed, incumbents often win because they face an inexperienced challenger or no challenger at all. If raising large sums of money has any deterrent effect on challenger entry, however, then we face an observational equivalence problem of determining why incumbents are winning.

their respective chambers. In contrast, serving as a committee or party leader does not appear to be sufficient to deter members from retiring, all else equal. At the same time, legislators representing the extreme wing of either party are not more likely to retire when compared with their more moderate colleagues in the chamber. Equally important, the results confirm my expectations that strategic behavior on the part of experienced candidates can influence the decision calculus of incumbents when choosing between seeking another term in office and retiring.

The findings in this chapter also have broader methodological implications for analyses examining strategic behavior between multiple actors. As illustrated by the model comparisons in the preceding section, many of the results reported in this paper almost certainly differ from those in the extant literature as a result of including effective controls for selection bias and strategic interaction between challengers and incumbents. As we investigate additional and related questions involving strategic interaction between multiple actors (e.g., members of Congress and the president, party leaders and rank-and-file members), we should be wary of the methodological issues raised here. Research continuing in the application of the strategic choice model demonstrated in this paper should be able to offer new insights that seek to further enrich our understanding of electoral and political behavior.

CHAPTER 5

CONCLUSION

In his discussion of the usefulness of position taking as an electoral strategy for members of Congress, Mayhew (1974a: 62) underscores the fact that “the congressman as [a] position taker is a speaker rather than a doer.” Legislators are not always required to pass laws or write legislation that *necessarily* results in favorable policy outcomes. Instead, legislators can reap electoral rewards merely by creating the appearance of maintaining a connection with their constituencies through an effective use of position taking strategies. In other words, the most effective electoral strategy for legislators may simply involve staking out a position on an issue that voters find agreeable. As Mayhew (1974a: 62) maintains, “[t]he position itself is the political commodity.”

This dissertation has explored the electoral consequences of one aspect of position taking in Congress—namely, that of roll call voting. I focus specifically on the electoral effects of roll calls in the House and Senate since this is the one area of position taking in which legislators are unable to avoid expressing positions that may be divisive to voters. “Outside the roll call process the congressman is usually able to tailor his positions to suit his audiences” (Mayhew 1974a: 63-64). However, with roll call votes, “there is no way for a member to avoid making a record on hundreds of issues, some of which are controversial in the home constituencies” (Mayhew 1974a: 65-66). I also examine the electoral impact of positions expressed on “key votes” as identified by *Congressional Quarterly* since these votes often deal with prominent or salient issues that attract the interest of political elites and “attentive publics” (Arnold 1990).

Since the positions expressed on prominent or salient roll calls may yield effects at the margins for incumbents, I argue that is important to consider the mechanism by which these positions generate observable electoral effects. While it is difficult to argue convincingly that voters regularly go to the polls with complete knowledge of how their representatives voted on even the most prominent legislative issues, it is reasonable to conclude that political elites draw attention to incumbents' voting behavior on individual roll calls. In discussing the strategic calculations associated with position taking, Arnold (1990) equates the behavior of challengers and incumbents to a game played between the competing actors:

Challengers are perhaps the most diligent players in this game. Few challengers fail to sift through incumbents' records in search of the smoking gun. They then employ their newly discovered evidence to persuade citizens how poorly their current representatives have served their interests (49).

Moreover, Arnold (1990: 49-50) contends that other disenchanted groups may highlight specific "inconsistencies" in legislators' position taking behavior, particularly if they suffered as a result of a member's pattern of voting.

As each of the essays in this dissertation suggests, legislators behave strategically in an attempt to avoid "mistakes" on roll call positions that may have detrimental effects in the next election. Whether or not this strategic behavior will have observable electoral effects is to some extent beyond the incumbents' control, however. While legislators are partly responsible themselves for translating positions into viable political commodities, the ultimate impact of their positions is determined to a considerable extent by decisions in the media, among special interests, and other political elites (e.g., quality challengers)

who are able to transform roll call positions into electorally consequential issues. Thus, even though voters themselves may not be aware of specifically how legislators voted on individual roll calls, there are still opportunities for awareness manifested by “attentive publics” who attempt to draw attention to the roll call voting patterns of incumbents in both the House and Senate.

Summary of Findings

In terms of my findings, the first essay examines the effects of position taking on key roll calls in the House of Representatives. In considering the frequency of electorally consequential roll calls in the House, I found considerable variation in the number of key votes that yielded observable electoral effects for incumbent legislators. Additionally, there were sufficient differences in the types of issues yielding electoral effects as well as notable variation across congresses in the number of statistically significant key votes. At times, the significance of these votes was notable in both a statistical and substantive sense, particularly on key votes where members appeared to be earning electoral rewards for defecting from a majority of their fellow partisans.

In examining why certain key roll calls yielded observable electoral effects while others did not, the second part of the analysis explored this issue systematically. Using the findings from the first part of the analysis as the dependent variable, I tested a probit model that examined whether positions on key votes would yield electoral consequences for incumbent House members. As expected, factors such as the degree of conflict on the original vote, the overall saliency of the issue, and the presence of intra-party conflict all strongly predicted which key votes would be electorally consequential. Also, differences

among Republicans and Democrats manifested themselves in this aspect of the analysis, suggesting that the factors that affected the electorally saliency of key votes is not always the same for members of the rival political parties.

The analysis in the second essay largely mirrors that conducted in the first, but shifts the central focus to the U.S. Senate. While the representational connection between position taking behavior and electoral outcomes has been given limited attention in the context of U.S. House elections, a related examination has not been carried out in terms of Senate elections. Thus, my analysis of electoral accountability in Senate elections in the second essay seeks to fill this void in the congressional elections literature. In terms of the results, many of the reported findings parallel those for the House. For instance, considerable variation exists in the types of Senate issues that yield observable electoral effects as well as the number of electorally significant key votes across cohorts of senators. In contrast, the results also suggest that the substantive effects of many key Senate votes can often be quite large and many votes that occur early (versus later) in a senator's tenure eventually prove to be electorally consequential.

Perhaps the most interesting comparison to be drawn between the analysis of electorally consequential votes in the House and the Senate involves the distinction in electoral safety of the membership in both chambers. Contrary to the conventional wisdom, senators do not appear to be more insulated from electoral considerations as a result of their longer terms of office. In certain respects, senators are more vulnerable than their counterparts, due partly to the greater competitiveness of Senate elections (fewer uncontested seats and more experienced challengers running in a given election year). This is, in part, a function of the greater attention afforded legislative behavior in

the Senate, a process that Mayhew (1974a) alludes to in his discussion of the potential electoral effects of position taking in the Senate versus the House. While senators were surely more insulated from popular sentiment prior to the passage of the Seventeenth Amendment (direct election of senators), this no longer appears to be the case under the existing rules for elections in the upper chamber.

In examining why certain votes and not others yield observable electoral effects for incumbent senators, many of the results are consistent with those of the House. As we saw with House votes, factors such as political saliency and the level of conflict on a roll call significantly impact its electoral significance. Beyond these factors, however, we also observe that key votes occurring in election years and ones on amendments are more likely to produce significant electoral effects. In conjunction with the findings for the House, this part of the analysis helps us better understand theoretically important factors that explain why a number of prominent roll calls yield effects at the margins for incumbent senators.

The third and final essay systematically examines whether experienced candidates regularly scrutinize the position taking behavior of legislators in the House and Senate when deciding if they should emerge in a given race. Unlike much of the extant literature focusing on issues of candidate emergence, I focus on the degree of strategic interaction between the challenger and the incumbent in this process. I employ a strategic choice model to analyze the extent to which the behavior of both incumbents and challengers are premised on strategic considerations. While we are aware that challengers may elect to stay out of race if conditions are perceived as less than favorable for them to win (see, e.g., Jacobson and Kernell 1983), we have less information about the strategic behavior

of incumbents when experienced candidates decide to emerge and challenge them. In this essay, I systematically test a number of hypotheses related to candidate competition in congressional races using STRAT, a program designed by Curtis Signorino to evaluate and test strategic selection models.

The results from the strategic model yielded a number of substantively interesting findings. First, experienced challengers' entry decisions are significantly related to the position taking behavior of legislators in both chambers. The more often members vote with their party on key votes, the more likely they are to face an experienced challenger in the subsequent election. Furthermore, the amount of money raised and spent by the incumbent in the previous appears to deter challengers in House races, but not in Senate races. When we shift to the incumbent side of the equation, the emergence of a strong challenger can effectively deter an incumbent from seeking reelection, particularly if the incumbent was involved in a scandal or won the previous election by a rather slim electoral margin. Moreover, holding a position of prestige (committee or party leader) does not necessarily deter incumbents in either the House or the Senate from retiring if they face a tough reelection battle against an experienced challenger.

In sum, the results reported in this dissertation shed new light on a fundamentally important issue in the context of congressional elections research—whether legislative behavior directly impacts legislators' electoral fortunes. Through an analysis of positions taken on key votes in both the House and the Senate, I have confirmed that incumbents' voting behavior on prominent and salient issues can be electorally consequential. Not only can the positions that legislators express on key votes cost them at the margins, they may also invite a challenge from an experienced candidate in the subsequent election,

making it more difficult for an incumbent to get reelected. Although incumbents today appear to enjoy a modest degree of success in avoiding electoral “mistakes” that may cost them the next election, the results in this dissertation suggest that many of the principles of democratic accountability are still intact in the electoral arena.⁶²

Extensions and Future Directions for this Research

Given the encouraging nature of the findings reported here, I doubt that this will be the last word on the subject of electoral accountability and roll call voting. For one, my exclusive focus on the electoral consequences associated with key roll calls precludes me from speaking to the relevance of other types of votes taken in Congress. While the evidence presented in this dissertation is largely consistent with my expectations, I cannot necessarily generalize to other types of votes. I focused exclusively on key roll call votes since they typically attract sufficient attention to result in observable electoral effects. To generalize beyond the analysis in this dissertation, it would be beneficial to consider a broader subset of votes in future work.

Additionally, the analysis in this dissertation deals principally with position taking on roll call votes, instead of considering position taking activities more broadly. For my analysis, I was interested in examining whether or not the positions legislators expressed on highly salient or prominent roll calls would produce observable electoral effects. To consider broader electoral effects associated with position taking in general, it would be

⁶² Even when one considers the large number of “safe” seats in a given election year, one should not forget the invaluable insight offered by Mayhew (1974a: 37): “When we say ‘Congressmen Smith is unbeatable,’ we do not mean that there is nothing he could do that would cost him his seat. Rather we mean, ‘Congressman Smith is unbeatable as long as he continues to do the things he is doing...normal political activity among politicians with healthy electoral margins should not be confused with inactivity. What characterizes ‘safe’ congressmen is not that they are beyond electoral reach, but that their efforts are very likely to bring them uninterrupted electoral success.”

necessary to look at other aspects of legislative behavior such as positions expressed on amendments to legislation, press releases or public statements, or even speeches on the House or Senate floor. While such an analysis is beyond the scope of this dissertation, an examination of these issues could further enhance our understanding of the effects of position taking behavior of elected representatives and build upon many of the important ideas presented by Mayhew in his classic text on Congress.

Finally, those seeking to build upon the findings reported in this dissertation could further examine the relationship between issues taken up in roll call votes and the impact of those votes in terms of legislators' constituencies. For instance, are constituents more likely to reward or punish incumbents for the positions they express on appropriations legislation given that the amount of money allocated to specific districts can be more easily tracked? Additionally, to what extent do members attempt to offset their position taking behavior with other potentially advantageous activities such as advertising and credit claiming? Further examination of these and other issues should continue to enrich our understanding of legislators' behavior, electoral accountability, and the underlying representativeness of democratic institutions.

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