Discharge Petition Bargaining in the House, 1995-2000*

René Lindstädt
Department of Political Science
Washington University
Campus Box 1063
St. Louis, MO 63130-4899
rlindsta@artsci.wustl.edu

Andrew D. Martin
Department of Political Science
Washington University
Campus Box 1063
St. Louis, MO 63130-4899
admartin@artsci.wustl.edu

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Abstract

This paper looks empirically at discharge petition bargaining in the 104^{th}, 105^{th}, and 106^{th} House. While previous approaches rely on vote buying theories, we offer an explanation based on the logic of informational cascades. The theory provides a number of directly testable hypotheses. We estimate event history models to understand not only the occurrence of, but the timing of, signatures on discharge petitions. Our results suggest that entrepreneurs structure their behavior to cause an informational cascade to occur. The findings also support the notion that many discharge petitions are used solely for position taking.

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1 Introduction

While the discharge procedure in the House of Representatives is infrequently used and may seem like a trivial institutional rule, the provision plays a potentially important role in legislative politics. Beth (1990) notes that "[t]he discharge rule gives a majority of Members a means to take up a measure with the cooperation of neither the leadership, the committee of jurisdiction, nor the Rules Committee" (p. i). In other words, the discharge rule allows a majority, *any majority*, to legislate without the consent of party leaders, the Rules Committee, or the committee of jurisdiction.

This is profoundly important in the context of various explanations of legislative behavior: party leadership conceptualizations of party power (Cox and McCubbins, 1993); the gatekeeping and agenda setting powers of the Rules Committee (Bach and Smith, 1988); and, most importantly, the power of the committee of jurisdiction (Shepsle, 1979; Krehbiel, 1993). While all of these factors account for some of what happens in the House, the discharge petition has the potential to undermine these institutional bases of power. The discharge provision thus sits at the nexus of party and organizational theories of Congress. By understanding behavior surrounding the discharge rule, we can better understand debates about organization, outlier committees, log-rolling and inter-issue bargaining, the role of party, and the like.

In this paper, we focus on the bargaining that takes place on individual discharge petitions. We will answer the question: Once filed, how does the bargaining over a particular petition take place? In other words, who signs, and when? Of course, understanding the bargaining process is only a first step in understanding the broader institutional role of the discharge procedure. Indeed, it is necessary to understand bargaining before studying the conditions under which petitions are likely to be successful, either by discharging a bill, or forcing a committee into action, and the broader institutional role the provision plays as an auditing mechanism. This paper thus serves as a first step of a broader research agenda.

We focus our attention on discharge petitions in the 104^{th}, 105^{th}, and 106^{th} Congresses, exploiting the rule changes that took place during in the 103^{rd} Congress and were instituted at the beginning of the 104^{th}. The rule change made the discharge procedure public, allowing members of Congress, the public, and researchers to not only observe whether a petition was filed, but also the signatures on the petition. We begin in the following section with a discussion of the discharge procedure. Section 3 reviews the relevant literature and summarizes the empirical findings from previous studies. In Section 4, we posit our explanation of discharge petition bargaining, which is based on the logic of informational cascades. These models yield a number of directly testable hypotheses. We then discuss our data and methods, and

present findings from our statistical models. The final section concludes.

2 The House Discharge Provision

The discharge provision is a mechanism by which any majority can force the floor to consider legislation without approval from the committee of jurisdiction, the party leadership, or the Rules Committee. The modern discharge rule was adopted in 1931 by the 72^{nd} House. This provision underwent two significant changes over the next seven decades. First, in 1935 the 74^{th} House raised the number of signatures needed for a successful petition from one third of the House to a statutory majority (218 members). Second, on the heels of a reform effort led by James R. Inhofe [R, OK] (US Congress. House. Committee on Rules., 1993), the 103^{rd} and 104^{th} Houses changed the rules to make all signatures on discharge petitions public, whether they were successful or not (for a comprehensive discussion of the history and use of the discharge rule, see Beth, 1990).[1]

Since the 72^{nd} House, the discharge provision has worked as follows. Once a bill or resolution has been before a substantive standing committee for thirty legislative days, any member can offer a discharge motion. For resolutions before the Rules Committee, only seven waiting days are required.[2] Thereafter, the Clerk of the House prepares a petition, which is made available at his or her desk to sign. Since the 103^{rd} Congress, the Clerk is responsible for publishing discharge petition signatures weekly in the *Congressional Record*, and for making cumulative lists available electronically via the internet.

Once the requisite number of members (one third until 1935, and a statutory majority thereafter) has signed a petition, the motion is placed on the Discharge Calendar, which according to House rules is privileged business on the second and fourth Mondays of the month (but not during the last six days of a session, or before *sine die* adjournment). On such days, precedent dictates that the member who filed the petition is recognized to offer the discharge motion. Debate lasts twenty minutes, with time divided between the member

[1]Making the procedure public might have fundamentally changed its role, making it a tool for position taking rather than an auditing mechanism to check committee power. An alternative research strategy is to consider those petitions before the 104^{th} with available data; unfortunately those are only the *successful* petitions, which are unrepresentative in a number of respects. Ideally we would like our conclusions to generalize to all discharge petitions; due to data availability, our conclusions might only apply to the contemporary rule. The procedure was used a large number of times before the rule change: between the 61^{st} and the 103^{rd} Congresses, 995 petitions were filed (Beth, 1990).

[2]The optimal strategy for an entrepreneur is to introduce a special rule to consider an unreported measure, which is reported to the Rules Committee. That resolution can thus be discharged in seven days instead of thirty days. By the 107^{th} Congress, all discharge petitions were waged against the Rules Committee in this fashion.

making the motion, and the chair of the committee being discharged. If the discharge motion is agreed to, a subsequent motion is in order to call for the immediate consideration of the bill or resolution as introduced. If this motion is successful, the bill is brought up under the general rules of the House: "money" bills are considered in the Committee of the Whole, under essentially an open rule; other bills and resolutions are dealt with under the hour rule. At the conclusion of consideration, a floor vote is taken on the original legislation.

In the simplest of terms, the House discharge provision makes it possible for *any* majority in the House of Representatives to pass *any* measure by signing a discharge petition, voting affirmatively on the discharge motion and the motion to consider, and voting "yea" on the final floor vote. This averts any committee or party gatekeeping. The only limiting factor is the time, measured in legislative days, that is needed for the process to take place. Yet, keeping a majority together through the process can be quite difficult. At any point before the vote on the discharge motion the committee of jurisdiction can report the measure, favorably or adversely, thus killing the discharge petition. If the discharge motion is defeated on the floor, no discharge petition regarding that measure, and similar measures, or a special rule to consider the measure, are in order for the remainder of the Session. While on face the rule is an esoteric institutional detail, it has the potential to undermine committee and party power in the House. This, added to the fact that it has been used over a thousand times (occasionally successfully) suggests that it is something worthy of academic study.

3 The Discharge Rule and Previous Literature

Only recently the discharge procedure has gained attention from some congressional scholars. As a consequence, the discharge procedure as a research subject remains mostly unchartered territory. The widespread disregard of the discharge petition in the literature is surprising given that the discharge procedure combines many of the most important topics in American political science today. The study of the discharge procedure promises to bring new insights to scholarship on congressional decision making and congressional organization, and the role of parties in legislatures.

The literature that has dealt explicitly with the discharge petition has been focusing on the question of party government. Krehbiel (1995), in one of the earliest empirical studies on the topic, studies cosponsoring and waffling with regard to the "A-Z Spending Bill" in the 103^{rd} Congress. He is primarily interested in determining the influence of partisanship on legislative behavior, and finds that non-partisan preference-based approaches to legislative

behavior fare significantly better than their partisan counterparts.[3] Krehbiel's study triggered a number of follow-up studies by scholars that refused to give up as quickly on partisan theories. Binder et al. (1999) take issue with Krehbiel's measurement choices, and find that partisan behavior, in fact, did play a role with regard to the "A-Z Spending Bill" [but see the reply by Krehbiel (1999b)]. The study by Martin and Wolbrecht (2000) on the Equal Rights Amendment supports the findings by Binder et al. (1999) concluding that partisan behavior has a distinct effect on the discharge procedure that is separate from purely preference-based considerations.

For several reasons these studies cannot be seen as the last word on the question of partisan behavior in discharge procedures. One of the main shortcomings of the studies cited is their reliance on a single-case-study framework, which seriously questions the generalizability of their results. Moreover, the theoretical models which these studies address have not been fully exhausted empirically. The vote buying theories by Groseclose (1996) and Groseclose and Snyder (1996) are more than a mere attempt to answer the question of partisanship. These theories address questions of legislative entrepreneurship, circumstance of legislative decisions, and incentives, considerations that are missing from previous empirical studies on the discharge procedure.

Our own study of the discharge procedure addresses many of the shortcomings of previous work. First of all, we make use of all the petitions that were filed after the rule change in the 103^{rd} Congress, up to and including the 106^{th} Congress, therefore avoiding the generalizability criticism. Second, our study has a firm theoretical footing in that it addresses many of the relevant implications of our theory. While we rely on information cascade models rather than vote buying theories, we address many of the same issues raised by Groseclose (1996) and Groseclose and Snyder (1996), including those of legislative entrepreneurship, incentives, and partisanship.

Undoubtedly, the question of partisan behavior in congressional decision making currently occupies the top spot in legislative studies. However, closer study of the discharge procedure promises to provide insights into other areas of congressional organization as well. As an institution that is designed to bypass committee power, the discharge procedure is also of interest for explanations of committee power. Traditionally, there have been two competing theories of legislative organization: committee-based, and party-based theories. The oldest of the committee-based approaches is the theory of distributive politics. The distributive theory of politics goes hand in hand with what has come to be called the textbook Congress (Polsby, 1968) according to which committees are the single, most dominant structures in Congress.

[3] See also Krehbiel (1993, 1999a).

Another central assumption of the distributive approach is that committees are ideological outliers relative to the floor (see, for instance, Shepsle, 1979). The force of committee power is based on the committee system's central role in enforcing bargains among members of Congress (Weingast and Marshall, 1988), and its strategic place in congressional procedures as a result of the ex-post veto (Shepsle and Weingast, 1987).[4]

Another committee-centered approach that was developed in direct response to the distributive politics theory is the informational approach (see especially Krehbiel, 1991). As the theory's name suggests, this approach focuses on the committee system's role in reducing uncertainty. Accordingly, the informational approach discards the committee-outlier hypothesis of the distributive approach, and asserts that committees should, and in fact are, representative of the floor (Gilligan and Krehbiel, 1990).

The party-based approach to studying congressional organization argues that committees are ultimately at the mercy of the majority-party leadership. Probably the most eloquent presentation of this argument is provided by Cox and McCubbins (1993), who argue that the majority party, and its leadership in particular, function as a legislative cartel aimed at solving the collective action problems of its members. The studies by Sinclair also emphasize the important role of party leadership (Sinclair, 1983, 1992). Rohde (1991) is more concerned with the circumstances under which parties are relevant.[5] According to the theory of conditional party government, parties play a particularly important role in congressional organization when intra-party preferences are relatively homogeneous (Rohde, 1991).[6]

The discharge petition as an institution speaks to many issues of committee and party leadership. The question raised by the discharge procedure really is the flip side of the question raised by Rohde (1991). Rohde is interested in determining under what circumstances party government is effective. In his conclusions, he suggests that party government is effective when intra-party preferences are homogeneous, and inter-party preferences are heterogeneous. The discharge procedure appears to be an instrument that becomes useful precisely when Rohde's conditions of party government are not met. As suggested by Maass (1983), the discharge procedure is used by the majority party membership if party and committee leaders diverge from the preferences of the party's rank and file membership.[7]

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[4]On this last point, see also the debate between Shepsle and Weingast, and Krehbiel (Krehbiel et al., 1987).

[5]See also Cooper and Brady (1981) as the first study on conditional party government.

[6]Again, see the preference-based approach by Krehbiel.

[7]See, however, our earlier comments on the usefulness of the discharge procedure as a position-taking

The discharge petition also can be interpreted in the context of the legislative cartel theory of Cox and McCubbins (1993). According to Cox and McCubbins, the majority party leadership's task is to solve the collective action problem of the party membership. For that reason, members abdicate powers to the party leadership, as they expect to have positive gains from this arrangement. In many ways, then, the legislative cartel theory is the party-centered equivalent of the committee-centered "gains from trade" hypothesis (Weingast and Marshall, 1988). Again, the discharge procedure helps us understand the circumstances under which delegation fails, and gains from trade fail to materialize. The study of the discharge petition then is a contribution to understanding the circumstances under which institutions like the committee system and party leadership fail to serve members of Congress.

4 The Theory of Infomational Cascades

To understand the dynamics of discharge petition bargaining, we rely on information cascade models rather than the vote buying models mentioned previously (Groseclose, 1996; Groseclose and Snyder, 1996). We find that information cascade models capture even better the idea of minimizing entrepreneurial costs. Initiating the right kind of sequence is potentially more effective and efficient than providing side payments to large numbers of legislators, as suggested in the vote buying model.

According to the canonical article by Bikhchandani et al. (1992), informational cascades occur "when it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information (p. 994)."[8] In their model, Bikhchandani et al. assume that individuals choose whether to adopt or reject some behavior, where adoption is associated with a strictly positive cost. They further assume that the ordering of decision makers is given exogenously. Individuals observe private (probabilistic) signals about the value of adopting some behavior. They observe previous actions but not previous signals. The solution concept used is Perfect Bayesian Equilibrium.

Bikhchandani et al. show that the larger the number of individuals, the more likely is the occurrence of a cascade (p. 1001). A cascade is started when an individual makes her choice by relying solely on the actions taken by previous decision makers, practically disregarding

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tool.

[8]See also Bikhchandani et al. for an elaborate non-formal explanation of cascade models (Bikhchandani et al., 1998, 154-55).

her own private information (p. 994). As a result, her choice has no informational value for subsequent decision makers (p. 994). All subsequent players disregard their own information as they find themselves in the same situation as the player that started the cascade (p. 994). Bikchandani et al. find that as a result of failing to make use of valuable private information, cascades prevent the convergence to optimal actions (pp. 998-999).

Generalizing the basic model, Bikchandani et al. relax the assumption of an exogenously given order of decision makers, and introduce the notion of costly delays. They show that under these more general circumstances highest-precision individuals move first (p. 1002). In the case that a higher-precision individual decides later in the sequence, she can reverse a cascade resulting in generally more precise actions by the decision makers (pp. 1003-04). Finally, Bikchandani et al. show that even small variations in the informational setting can have a significant impact on the timing of the cascade (p. 1003). Political science applications of these models include Kuran's (1991) study of the East European Revolution of 1989, and Lohmann's (1994) study of the Monday Demonstrations in Leipzig between 1989 and 1991 and their impact on the collapse of the East German regime.

4.1 The Discharge Petition Bargaining Process as an Information Cascade

The existing theories of discharge petition bargaining rely on explicit vote buying models. Krehbiel (1995), in an article on the "A-Z Spending Bill," argues that models of nonpartisan vote buying are most appropriate to characterize bargaining over discharge petitions. The critical question in theories of vote buying is who will the policy entrepreneur buy off first, second, etc. to minimize costs. Groseclose and Snyder (1996) argue that political entrepreneurs should try to buy off moderates first, as they require lower side payments than more extreme legislators. Here is where we see the connection with informational cascade models. In the end, vote buying legislators simply try to create a cascade that minimizes their costs. The reason why we rely on cascade models rather than vote buying models is that they provide us with a much richer set of testable hypotheses. Whereas vote buying theories only suggest that legislative entrepreneurs should buy off moderates first, cascade models describe a number of additional strategies for building winning coalitions. And, more importantly, informational cascade models describe the dynamics of the process.

What would an information cascade look like in the context of the discharge procedure? Suppose there is a policy entrepreneur that wants to discharge a bill from the House Agricultural Committee.[9] Each member of the House receives a private (probabilistic) signal about

[9]We use the terms "entrepreneur" and "leader" synonymously.

her realized value in case she signs the discharge petition. If the member decides to sign the discharge petition, she incurs a strictly positive cost.[10] The entrepreneur decides on the sequence according to which she will attempt to buy off enough legislators to discharge the bill. The decision the entrepreneur faces is how to initiate the lowest-cost cascade that at the same time minimizes the risk of being disrupted. Besides approaching members in a particular order to sign the petition, the entrepreneur could also subsidize individual members to reduce their cost of signing.[11]

The result of this simple setup is a model of entrepreneurship that takes into account the dynamics of collective action. There are two important implications for entrepreneurial strategies. First of all, we know that one of the entrepreneur's primary considerations is how to induce the "right" cascade. Stated differently, the entrepreneur needs to decide whether she wants to bring about an "up-cascade" (petition is successful) or a "down-cascade" (petition fails).[12] The entrepreneur in our example would of course try to initiate an up-cascade, whereas a member of the committee facing discharge would try to counter that with the initiation of a down-cascade. Of equal importance is the entrepreneur's selection of her first two "targets." Only if the first two members choose the same action, will a cascade follow. Otherwise, the entrepreneur has to start anew with the third member in the sequence (Bikhchandani et al., 1998, p. 156).

Cascade models provide several hypotheses that are applicable to the discharge context. For the purposes of the current paper, we have two categories of hypotheses: main hypotheses and auxiliary hypotheses. The main hypotheses are the ones we can directly test using the available data. The auxiliary hypotheses also follow from the theoretical model, but their evaluation requires additional data at a different level of analysis. We leave these auxiliary hypotheses to future research.

4.2 Main Hypotheses

We use the equilibrium predictions of informational cascade models to develop a number of hypotheses about discharge petition bargaining. Our first hypothesis states that petition

[10]This is approach of modelling informational cascades is taken from the original article by Bikhchandani et al. (1992). Note also that the cascade approach fits nicely here, as each legislator's choice set is discrete (see Bikhchandani et al., 1998, p. 159).

[11]This ties the cascade approach back to the vote buying approach used in the theoretical literature on discharge petitions and other legislative processes (Groseclose, 1996; Groseclose and Snyder, 1996).

[12]See Bikhchandani et al. (1992) and Bikhchandani et al. (1998) for the terminology used here.

filers should avoid having to buy off members of the committee they try to discharge.[13] The reasoning is that committee members most likely observe more accurate signals, and could therefore easily disrupt an ongoing cascade.[14] From this follows the first hypothesis:

> *H1: A discharge petition leader should avoid including in the discharge coalition members of the discharged committee, as they are more likely to disrupt the petitioning process (Naive Committee Disruption Hypothesis).*

However, our second hypothesis – the "fashion leader" hypothesis – suggests that it would be optimal to buy off fashion leaders first, as this guarantees the immediate initiation of a cascade [see (Bikhchandani et al., 1992, p. 1003) and (Bikhchandani et al., 1998, p. 160)]. The equivalent of fashion leaders in Congress are members who are generally acknowledged for their expertise, as for instance members on the respective committees. Combined with the previous hypothesis, this suggests that entrepreneurs target expert members on the discharged committee who were in opposition to the committee majority. The refined hypothesis states the following:

> *H2: A discharge petition entrepreneur should try to first win over those members of the discharged committee that are closest ideologically to her own position, as their participation will increase the probability of a successful discharge petition (Committee Fashion Leader Hypothesis).*

Committee members, however, are not the only potential fashion leaders in Congress. Other members that might exert a similar kind of influence are party leaders and senior members. The Seniority Fashion Leader Hypothesis takes the following form:

> *H3: A discharge petition entrepreneur should try to target senior House members first, as their participation will increase the probability of a successful discharge petition (Naive Seniority Fashion Leader Hypothesis).*

More likely than not, however, the discharge petition entrepreneur is not going to approach just any senior members, but rather is going to primarily target those senior House members that are close to his own ideological position. The refined hypothesis then states:

> *H4: A discharge petition entrepreneur should target those senior House members first who are ideologically close to her own position, as their participation*

[13] This hypothesis is directly adopted from Bikhchandani et al. (Bikhchandani et al., 1998, pp. 157-58).

[14] According to Bikhchandani et al. higher-precision individuals can easily bring about cascade reversals (Bikhchandani et al., 1992, pp. 1003-04).

will increase the probability of a successful discharge petition (Seniority Fashion Leader Hypothesis).

The model also provides for something akin to party effects, as parties take on the role of mobilizing forces, thereby increasing a cascade's probability of success.[15] Here, the hypothesis is that discharge petition leaders should target party leaders first. Or stated differently, discharge petitions should be more successful if party leaders sign them early on.

H5: If the issue under consideration is partisan, the discharge leader should approach party leaders first, as party leaders' influence on the party rank and file helps to speed up the discharge petition process, and to reduce the discharge petition leader's costs (Naive Party Fashion Leader Hypothesis).

Again, though, it appears reasonable to expect that discharge petition entrepreneurs will not target just any party leaders, but rather those that are closest to their own ideological position. Consequently, the refined hypothesis states:

H6: If the issue under consideration is partisan, the discharge leader should approach those party leaders first that are closest to her own ideological position, as party leaders' influence on the party rank and file helps to speed up the discharge petition process, and to reduce the discharge petition leader's costs (Party Fashion Leader Hypothesis).

Finally, Bikchandani et al. suggest entrepreneurs should target individuals that have the largest number of ideological neighbors (Bikhchandani et al., 1992, p. 1006, fn. 21). We add to this hypothesis that discharge petition entrepreneurs should target those individuals that have the largest number of ideological neighbors, who at the same time are closest to the entrepreneur's own ideological position.

H7: To speed up and smoothen the coalition-building process, discharge petition entrepreneurs should target members in large ideological clusters that are closest to their own ideological position (Inside-Out Hypothesis).[16]

We will test each of these hypotheses in Section 6.

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[15] Compare with Kuran's discussion of pressure groups (Kuran, 1991, p. 25).

[16] Note the difference between the *Inside-Out Hypothesis* and the vote buying theory's hypothesis of targeting moderates. According to our hypothesis, discharge petition entrepreneurs should target not the floor moderates but rather those members who are moderates from the entrepreneur's point of view.

4.3 Auxiliary Hypotheses

There are several hypotheses that, while following directly from the theoretical model, are not testable with existing data at the level of our analysis. In fact, all three of the following hypotheses require a measure for complexity of legislation, and must be tested at the petition level. We posit the hypotheses here to indicate the richness of the cascade model, and to suggest opportunities for further research.

One such hypothesis builds on the committee-related hypotheses. The coalition-building process might be sped up even further, if signals are costly, so that individual decision makers are even more willing to depend on the actions of previous decision makers (Bikhchandani et al., 1998, p. 162). This scenario is easily translated into the congressional context. If the issue under consideration is very complicated, information gathering costs might be too expensive for most members. As a result, they rely on more informed fellow members. Hence, the more complicated the issue at hand, the faster is the emergence of an informational cascade.

> *AH1: If the issue under consideration is very complex, and its evaluation requires substantial expertise, potential signatories of the discharge petition are more likely to rely on expert members, therefore not only speeding up the process of coalition building, but also decreasing the costs for the discharge petition leader, who under these conditions only needs to buy off fashion leaders (Expertise Hypothesis).*

Similar effects are possible with respect to parties. In the original model, such party effects are denoted as network externalities (Bikhchandani et al., 1998, pp. 162-63). These network externalities are especially important when signals are very costly. Consequently, party effects should be especially strong when the subject matter is very complicated.

> *AH2: Party effects should be most pronounced in cases of complex issues, as potential signatories of the discharge petition will rely more heavily on party leaders, therefore not only speeding up the process of coalition building, but also decreasing the costs for the discharge petition leader, who under these conditions only needs to buy off party fashion leaders (Party/Extended Expertise Hypothesis).*

Finally, translating Lohmann's findings into the current context suggests that policy entrepreneurs should target moderates first, as they are vital to the successful initiation of

a cascade (see Lohmann, 1994, p. 53).[17] Given previous hypotheses, this should be most relevant in cases of less complex issues, since more complex issues should induce discharge petition leaders to target fashion leaders (of all kinds) first (see above).

> *AH3: If the issue under consideration is straightforward, or only moderately complex, discharge petition leaders should target moderate members first, as they are vital to successful coalition building (Inside-Out Hypothesis).*[18]

The theoretical models, we have been drawing on suggest even further hypotheses, which however are not easily translated into the discharge petition context, and therefore are omitted from the analysis.[19] Next, we turn to a discussion of our data and methods. Subsequently, we use the data to test our main hypotheses.

5 Data and Methods

To test our hypotheses about discharge petition bargaining, we require data that includes specific information about who signed a discharge petition on what calendar day. These data are available from the Clerk of the House for all discharge petitions from the 104^{th} House to the present. In this paper, we restrict our analysis to the thirty-four discharge petitions filed in the time period between the 104^{th} and 106^{th} Congress. Of these thirty-four petitions, we had to eliminate fifteen due to lack of variance in the response variable caused by small numbers of signatures. We select petitions that have attracted signatures from at least ten per cent of the overall House membership. That leaves us with nineteen petitions, or 56% of the universe of cases. It is not unreasonable to assume that the excluded cases are solely position taking actions by the entrepreneurs and the small cohort of members who signed.

[Table 1 about here.]

[17] Note, however, that the leadership story developed here goes contrary to Lohmann's findings regarding the Monday Demonstrations in Leipzig. She argues that the cascade was disrupted once the demonstrations became more organized (see for instance Lohmann, 1994, p. 57). We opt for a synthesis of the two approaches combining the leadership with the cascade model, even though it might not be applicable to Lohmann's particular case study.

[18] See also Groseclose and Snyder (1996) or Groseclose (1996) for similar hypotheses. In fact, the vote buying model hypothesis could be tested very easily with our data. It would simply require a variable measuring the Euclidean distance of each member's ideal point from the mean ideal point. We could not include such a variable in our model, as it would be perfectly collinear with our Euclidean distance measure.

[19] For instance, one of the models suggests that it might be beneficial to first target separate groups that are only later combined (see Bikhchandani et al., 1992, p. 1017).

Our dependent variable is the number of days after introduction until signing of the petition by each individual member. This variable is heavily right-censored, as most members never sign the petition. The independent variables included in the analysis are a dummy variable for party membership (*partyd*), a variable measuring the Euclidean distance of each member's First Dimension NOMINATE score (Poole and Rosenthal, 1997) from the petition filer's score (*eucldis*), a chamber seniority variable (*chamsen*), a dummy variable for membership on the committee that is being discharged, a dummy variable for membership on the Rules Committee (*rulcom*), and a dummy variable indicating whether the legislator held a party leadership position (*leader*).

The variable measuring Euclidean distance has a total possible range of two. The larger the number is, the further away a member is ideologically from the member who filed the petition. In accordance with the *Inside-Out Hypothesis*, we expect an increase in *eucldis* to reduce the daily hazard of signining the petition. Stated differently, we expect members who are far away ideologically from the initiator of the petition to be less at risk, and therefore less likely to sign the petition.

The dummy variable for membership on the Rules Committee takes on a value of one if a legislator is a member of the Rules Committee, and zero if a legislator is not a member of the Rules Committee. According to the *Naive Committee Disruption Hypothesis*, we would expect that *rulcom* reduces the daily hazard of signing the petition, as the petition filer avoids to include Rules Committee members into his coalition. According to the *Committee Fashion Leader Hypothesis*, however, the petition filer should target those Rules Committee members that are closest to his own ideological position. For the purpose of testing the *Committee Fashion Leader Hypothesis* for Rules Committee membership, we include an interaction term between *eucldis* and *rulcom*. We expect this interaction term to reduce the daily hazard of signing the petition, as increases in *eucldis* reduce the probability of including Rules Committee members into the discharge coalition.

The dummy variable for membership on the committee being discharged takes on the value one if a legislators is a member of that committee, and zero if a legislator is not a member of the committee. If the *Naive Committee Disruption Hypotheses* is correct, we would expect the committee dummy to reduce the daily hazard of signing the petition. As the petition filer refuses to include members of the discharged committee in his coalition, those committee members are less at risk, and therefore less likely to sign the petition. As in the previous case of Rules Committee membership, we include an interaction term between the committee dummy and *eucldis* to test the *Committee Fashion Leader Hypothesis* for the committee being discharged. Again, increases in *eucldis* should have the effect that the interaction term reduces the daily hazard of signing the petition.

The chamber seniority variable measures years of continuous service in the House (Stewart, 1998). In accordance with the *Naive Seniority Fashion Leader Hypothesis*, we expect *chamsen* to increase the daily hazard of signing the petition. That means as discharge petition entrepreneurs target senior members of the House first, senior members should be more at risk than less senior members. According to the *Seniority Fashion Leader Hypothesis*, however, the discharge petition entrepreneur should not target just any senior members, but rather those that are ideologically close to his own position. We test this hypothesis by including an interaction term between *chamsen* and *eucldis*. We expect that this interaction term decreases the daily hazard of signing a petition, as senior members far away ideologically from the discharge petition entrepreneur are less likely to be targeted.

The dummy variable for leadership position takes on a value of one if a legislator is a party leader (in either one of the parties), and zero if a legislator is not a party leader.[20] According to the *Naive Party Fashion Leader Hypothesis*, we expect *leader* to increase the daily hazard of signing a petition. However, the *Party Fashion Leader Hypothesis* suggests that a discharge petition entrepreneur should only target those party leaders that are closest to her own ideological position. We test this hypothesis by including an interaction term between *leader* and *eucldis*. The expected effect of this interaction term should reduce the daily hazard of signing a petition with increases in *eucldis*.

Finally, we include a party dummy as a control variable to address the debate between preference-based and party-based approaches. If the party-based approaches are correct, we would expect *partyd* to decrease the daily hazard if the discharge petition entrepreneur is Republican, and increase the daily hazard of signing a petition if the discharge petition entrepreneur is a Democrat. If the preference-based approach is correct, the effect of *partyd* should not be statistically significant.

Statistically modeling our response variable requires a model explicitly designed for the duration of events (which are surely not conditionally Normal), and that takes into account the right censoring in the data. The model we choose to adopt for this application is a Cox (1972) semiparametric proportional hazards model. While this model shares one key assumption with the fully parametric models (proportional hazards), it places no distributional assumptions on the baseline hazard rate. This flexibility is desirable, as suggested,

[20]For the purpose of the current analysis leadership positions are the following: Speaker of the House, Majority Party Leader, Minority Party Leader, Majority Party Whips and Deputy Whips, Minority Party Whips and Deputy Whips, Democratic Caucus Chairman, House Democratic Caucus Secretary/Vice Chairman, House Democratic Congressional Campaign Committee Chairman, House Democratic Policy Committee Chair, Republican Conference Chairman, House Republican Conference Vice Chairman, House Republican Conference Secretary, House Republican Policy Committee Chairman, and House National Republican Congressional Committee Chairman.

for example, by Box-Steffensmeier and Zorn (2001). These models are becoming more commonly used in political science; some authors have used these models to study the longevity of cabinets (King et al., 1990; Warwick, 1992), the length of wars (Bueno de Mesquita and Siverson, 1995; Bennett and Stam, 1996; Bennett, 1997), and the careers of members of Congress (Box-Steffensmeier, 1996; Box-Steffensmeier et al., 1997; Katz and Sala, 1996). In addition, three political scientists have written review articles of duration models of special note (Box-Steffensmeier and Jones, 1997; Box-Steffensmeier and Zorn, 2001).

The Cox (1972) proportional hazards model is customarily written using hazard rate notation. A hazard rate is defined as the conditional probability of failure for an individual at time t. In our context, then, the hazard rate is the conditional probability of a legislator signing a discharge petition at time t. Let T represent the occurrence of a failure at time T. One can then model the hazard rate for individual i as follows:

$$h_i(t) = Pr(T = t | T \geq t) = f(x_i^{'}\beta)$$

Here $x_i^{'}$ represents a $(1 \times p)$ row vector of covariates for individual i, and β is $(p \times 1)$ column vector of effect parameters to be estimated.

The key assumption of Cox's proportional hazards model is that the hazard functions for each case differ only by a factor of proportionality. This is a somewhat restrictive assumption, however, as we discuss below, there exist diagnostic techniques to detect non-proportionality, and remedies to correct the problems (Box-Steffensmeier and Zorn, 2001). Unlike the parametric models most frequently used in political science, we make no assumptions about the baseline hazard rate for each legislator. For individual i, we model the hazard rate as follows:

$$h_i(t) = h_0(t) \exp(x_i^{'}\beta)$$

Note that $h_0(t)$ is the baseline hazard rate. We make no assumptions about the baseline hazard. Our only assumption is that hazard rates are proportional across cases. It is important to note that when estimating a Cox proportional hazards model one does not include a constant because it is absorbed into the baseline hazard rate. The model is estimated with the partial likelihood method using the Efron approximation to deal with ties.[21]

6 Results

The findings of our empirical study of the nineteen selected discharge petitions between 1995 and 2000 has yield mixed results for our hypotheses. Table 2 contains our parameter

[21] All of the statistical analysis is performed in R using the `survival` package.

estimates for the Cox proportional hazards model fit to each dataset. For many models it was impossible to include certain covariates because they did not vary among those who signed (or did not sign) the petition; those cells are denoted NA. While the coefficients of several explanatory variables consistently have the correct sign across most of the petitions, they fail to achieve statistical significance (*rulcom*, *leader*, *eucldis:rulcom*, and *eucldis:leader*).[22] Consequently, we cannot draw any conclusive inferences from these variables, and therefore fail to find support for the hypotheses. The failure of some of these variables to gain statistical significance is potentially due to the low number of cases in each petition. Moreover, there are only thirteen members on the Rules Committee, and only twenty members that qualify as being classified as party leaders. Additionally, we only have a small number of signatures on several petitions resulting in low variance.

[Table 2 about here.]

While we fail to find evidence that supports hypotheses *H1*, *H2*, *H4*, *H5*, and *H6*, not all of the news is bad. We find consistent support for the *Inside-Out Hypotheses* (*H7*) across our sample of petitions. The data, in accordance with the *Inside-Out Hypotheses*, shows that discharge petition entrepreneurs, in fact, build coalitions around their own ideological position. The results suggest that discharge petition entrepreneurs do *not* target moderates, as suggested by vote buying theories. The confirmation of the *Inside-Out Hypotheses* is also not just an artifact of the discharge petition entrepreneurs' ideological types. If discharge petition entrepreneurs were consistently moderates across the sample of petitions, we would, of course, not be able to reject the prediction of vote-buying theories that moderates are targeted first. However, a look at the data suggests that less than half of the discharge petition entrepreneurs could be classified as moderates.

The results generated by the chamber seniority measure (*chamsen*) are also rather curious. While we reject the *Naive Seniority Fashion Leader Hypothesis*, this might be less due to the hypothesis itself, but to a classification error. Initially, we believed that discharge petition entrepreneurs should try to include senior House members into their coalition early on. However, we might have underestimated the potential disruptive effects senior members might have on the coalition-building process. The results for the chamber seniority measure consistently suggest that senior House members – very much like committee members (see *H1*) – seem to have a disruptive effect on the coalition-building process, and therefore are not targeted by discharge petition entrepreneurs. The explanation appears reasonable, as there

[22]Note that we use the notation ":" to denote interaction.

is an argument to be made that senior House members like committee members have substantial experience and expertise that allows them to observe more accurate signals. In sum, we argue that our initial classification of seniority was incorrect, and that seniority really occupies the same role as committee membership when it comes to discharge procedures.

The final result of our paper concerns the debate over party-based versus preference-based explanations of legislative behavior. For the purpose of testing the party-based theory in the discharge petition context, we included a dummy variable for party membership into our statistical model. The results from our sample consistently suggest that party matters in discharge procedures, confirming the various party-based theories mentioned earlier (see for instance, Binder et al., 1999; Martin and Wolbrecht, 2000; Rohde, 1991; Cox and McCubbins, 1993, 1997; Sinclair, 1983, 1992). This is a particularly strong finding because partisan considerations are also being tapped in the NOMINATE measure used to form the Euclidean distance covariate. It also seems to suggest that vote-buying theories (Groseclose, 1996; Groseclose and Snyder, 1996), and the preference-based explanations of legislative behavior that build on them (Krehbiel, 1993, 1995, 1999a), do not capture the entirety of congressional bargaining.

Since there is not enough space to present complete results for nineteen petitions, we have decided to further focus on two petitions in detail. Let us first start with petition Number 1 in the 106^{th} Congress. The Cox proportional hazards results are shown in Table 3. The estimated baseline survival function for the model is shown in Figure 1.

[Table 3 and Figure 1 about here.]

From Table 3, we learn that the party dummy variable (*partyd*) is statistically significant. The coefficient in the first column of the table is not easily interpretable, though the positive sign in front of the coefficient tells us that *partyd* increases the daily hazard of signing the petition. The direction of the effect lends support to party-based explanations of legislative behavior, as the discharge petition entrepreneur for the first petition in the 106^{th} Congress was Jim Turner, a Democrat from Texas. The question remains, however, to what degree party increases the daily hazard of signing. For this information, we turn to the exponential coefficients in the second row of Table 3. The exponential coefficient for *partyd* tells us that – holding everything else constant – being a Democrat increases the daily hazard of signing over one-hundred times. The differences in the daily hazard between Democrats and Republicans are depicted in Figure 2, which shows the estimated survival function for Democrats and Republicans, setting all the continuous variables to their mean, and all the dummy variables to zero. The dotted lines indicate the daily hazard of signing for Democrats, and the solid lines represent the daily hazard for Republicans (each category with point-wise

95% confidence envelopes). The differential effect is quite strong, and suggests that, at least for this particular petition; party mattered a great deal, even after controlling for ideological factors.

[Figure 2 about here.]

The variable measuring chamber seniority (*chamsen*) is marginally significant. The effect of *chamsen* on the daily hazard is negative, which means being a more senior member of the House reduces the daily hazard of signing. This result contradicts our hypothesis *H3*. However, as suggested earlier, it seems as if chamber seniority has an effect similar to that of committee membership: More senior members of the House are more likely to disrupt the petitioning process. The exponentiated coefficient for *chamsen* tells us that – holding everything else constant – an additional year of chamber seniority reduces the daily hazard of signing by approximately 6%. In Figure 3, we contrast the estimated survival functions for the most junior (one year of service), and the most senior (23 years of service) member in the data set, again, setting all the continuous variables to their mean, and all the dummy variables to zero. The effect is not as strong as that for party, but it is still noticeable.

[Figure 3 about here.]

Interpretation of the results for the eleventh petition in the 106^{th} Congress follows the same logic. These results are shown in Table 4. The estimated survival function is depicted in Figure 4. In this petition, only the measure for Euclidean distance (*eucldis*) is statistically significant. The effect of *eucldis* is negative, and therefore as predicted by hypothesis *H7*. According to *H7*, and the results for this petition, greater distances from the ideological position of the discharge petition entrepreneur make signing of the petition less likely. Again, though, the question arises of how big this effect is. Looking at the exponential coefficient for *eucldis*, we find that one additional unit of *eucldis* (which is half the range of the variable) – holding everything else constant – reduces the daily hazard of signing the petition by close to 99%. The contrast between the estimated survival functions for members closest to the discharge petition entrepreneur's ideological position (*eucldis*=0), and the members furthest away (*eucldis*=1.84) from her is shown in Figure 5.

[Table 4 and Figures 4 and 5 about here.]

7 Conclusions

In this paper we have look at bargaining over discharge petitions using the logic of information cascades models, an approach that has engendered little use in the legislative politics

subfield. We argue that information cascade models provide a richer set of hypotheses that help to explain legislative bargaining than other approaches, such as the commonly used vote buying theories. Using data from nineteen discharge petitions that were filed between 1995 and 2000, we test seven hypotheses using survival models.

We find support for two hypotheses that are consistent with the theoretical model. The results show overwhelming support – across petitions – for our *Inside-Out Hypothesis*, which posits that discharge petition entrepreneurs should target members in their ideological neighborhood. We also find support for a naive seniority disruption hypothesis, which was originally not included in the analysis. According to this explanation, discharge petition entrepreneurs should refrain from targeting senior members, as they might disrupt the petitioning process. We also find support for the argument that parties in Congress matter. Party is statistically significant, and very influential, across the sample of petitions suggesting that party membership influences the process of legislative bargaining.

In further research we plan to update the current data set to include the petitions from the 107^{th} Congress. We also plan on developing a bill complexity measure to test some of the auxiliary hypotheses. We have aggregate data on discharge petitions that includes data for every petition every filed since the inception of the discharge rule, as well as the signatories of all successful petitions since the inception of the rule, which we will plan to use for a longitudinal study of the discharge rule. This research is a first step toward understanding an institutional rule that only only provides a great arena to test various theories of legislative bargaining, but also one that has profound implications regarding the nature of committee and party influence.

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House	*Petition*	*Sponsor*	*Signatures*	*Committee*	*Summary*
104	02	Stockman (R)	54	Rules	H.Res. 111: Protection of legislative powers from encroachment by the executive branch (H.R. 807).
104	06	Bryant (D)	88	Rules	H.Res. 240: Combating of terrorism (H.R. 1710).
104	08	Kennedy (D)	173	Rules	H.Res. 292: Public debt limit increase (H.R. 2409).
104	12	Smith (R)	48	Rules	H.Res. 373: Financing of federal elections (H.R. 2566).
104	15	Bonilla (R)	51	Rules	H.Res. 466: Reauthorization and Amendment of Endangered Species Act of 1973 (H.R. 2275).
105	03	Baesler (D)	191	Rules	H.Res. 259: Amendment to Federal Elections Campaign Act of 1971 (H.R. 1366).
105	04	Slaughter (D)	64	Commerce	Prohibition of discrimination on the basis of genetic information (H.R. 306).
105	06	Obey (D)	45	Rules	H. Res. 473: Supplemental appropriations for fiscal year 1998 (H.R. 3580).
105	07	Ganske (R)	189	Rules	H. Res. 486: Consumer protection amendments to the Public Health Service Act, the Employee Retirement Income Security Act of 1974, and the Internal Revenue Code of 1986 (H.R. 3605).
106	01	Turner (D)	202	Rules	H. Res. 122: Amendment to Federal Elections Campaign Act of 1971 (H.R. 417).
106	03	Dingell (D)	184	Rules	H. Res. 197: Consumer protection amendments to the Public Health Service Act, the Employee Retirement Income Security Act of 1974, and the Internal Revenue Code of 1986 (H.R. 358).
106	04	DeGette (D)	103	Rules	H. Res. 192: Import ban on large capacity ammunition feeding devices (H.R. 1037).
106	05	Rangel (D)	189	Rules	H. Res. 240: Amendment to the Internal Revenue Code of 1986 to incentivize public school improvements (H.R. 1660).
106	06	Bonior (D)	165	Rules	H. Res. 301: Amendment to the Fair Labor Standards Act of 1938 to increase the Federal minimum wage (H.R. 325).
106	07	Shows (D)	148	Rules	H. Res. 371: Prescription drug price reduction for Medicare recipients (H.R. 664).
106	08	Stark (D)	143	Rules	H. Res. 372: Medicare Program Amendment to title XVIII of the Social Security Act (H.R. 1495).
106	09	Minge (D)	191	Rules	H. Res. 478: Amendment to extend appropriations for the Older Americans Act of 1965 (H.R. 773).
106	10	Moore (D)	196	Rules	H. Res. 508: Amendment to the Internal Revenue Code of 1986 regarding Federal Election Commission reporting requirements for certain political organizations.
106	11	Slaughter (D)	178	Rules	H. Res. 520: Prohibition of discrimination on the basis of genetic information (H.R. 2457).

Table 1: Characteristics of the nineteen discharge petitions in our study.

Petition	*partyd*	*eucldis*	*chamsen*	*rulcom*	*comcom*	*leader*	*eucldis: chamsen*	*eucldis: rulcom*	*eucldis: comcom*	*eucldis: leader*	R^2	N
h104p02	−0.416 [0.700]	−2.741** [0.024]	−0.326** [0.000]	NA	NA	NA	0.236* [0.077]	NA	NA	NA	0.149	439
h104p06	NA	−3.746** [0.000]	−0.004 [0.890]	−1.234 [0.220]	NA	1.418** [0.005]	NA	NA	NA	−0.365 [0.850]	0.312	440
h104p08	4.591** [0.000]	−0.800 [0.300]	−0.011 [0.730]	−0.062 [0.920]	NA	0.600 [0.310]	−0.041 [0.700]	0.293 [0.910]	NA	−0.4677 [0.870]	0.604	439
h104p12	−0.361 [0.670]	0.102 [0.910]	−0.210** [0.023]	NA	NA	NA	0.173** [0.026]	NA	NA	NA	0.023	439
h104p15	3.188** [0.003]	−5.498** [0.000]	−0.095** [0.047]	−0.679 [0.500]	NA	−0.406 [0.690]	NA	NA	NA	NA	0.116	439
h105p03	6.956** [0.000]	0.507 [0.340]	−0.107** [0.008]	−0.185 [0.900]	NA	0.719 [0.510]	0.092 [0.210]	−0.793 [0.840]	NA	−1.100 [0.590]	0.648	445
h105p04	NA	−3.372** [0.000]	−0.063 [0.120]	−0.289 [0.780]	0.109 [0.780]	−0.094 [0.900]	−0.016 [0.910]	NA	NA	1.190 [0.460]	0.216	446
h105p06	NA	−2.852** [0.002]	0.0352 [0.390]	0.003 [1.000]	NA	−0.170 [0.850]	−0.033 [0.830]	−0.275 [0.930]	NA	0.960 [0.640]	0.126	446
h105p07	NA	4.027** [0.000]	0.022 [0.700]	0.216 [0.870]	NA	0.337 [0.730]	−0.071 [0.210]	−1.496 [0.270]	NA	−0.731 [0.420]	0.516	446
h106p01	4.632** [0.000]	−0.161 [0.840]	−0.061* [0.088]	NA NA	NA NA	0.605 [0.400]	0.119 [0.290]	NA	NA	−0.886 [0.670]	0.635	437
h106p03	3.020** [0.001]	−5.305** [0.000]	−0.067** [0.011]	−0.392 [0.580]	NA	0.265 [0.580]	0.293* [0.052]	2.135 [0.440]	NA	−2.453 [0.520]	0.632	437
h106p04	NA	−5.657** [0.000]	−0.080* [0.068]	1.573 [0.160]	NA	0.387 [0.450]	0.059 [0.730]	−1.194 [0.730]	NA	0.744 [0.700]	0.400	439
h106p05	3.032** [0.000]	−3.354** [0.000]	−0.094** [0.001]	−0.252 [0.670]	NA	0.626 [0.250]	0.129 [0.320]	NA	NA	−0.941 [0.780]	0.640	437
h106p06	1.571** [0.038]	−3.902** [0.000]	−0.000 [0.990]	−0.164 [0.850]	NA	−0.120 [0.790]	−0.015 [0.910]	−0.247 [0.940]	NA	1.107 [0.580]	0.555	437
h106p07	6.203** [0.000]	1.830** [0.043]	−0.091 [0.110]	2.046 [0.330]	NA	0.870 [0.360]	0.159 [0.220]	−4.799 [0.440]	NA	−2.020 [0.340]	0.504	437
h106p08	NA	−4.522** [0.000]	−0.004 [0.890]	0.238 [0.690]	NA	NA	−0.024 [0.820]	NA	NA	NA	0.495	439
h106p09	6.518** [0.000]	−1.397 [0.100]	−0.125** [0.001]	−0.083 [0.890]	NA	0.511 [0.450]	0.368** [0.002]	NA	NA	−0.722 [0.750]	0.648	437
h106p10	5.984** [0.000]	0.159 [0.860]	−0.086** [0.023]	−0.296 [0.620]	NA	0.564 [0.370]	0.089 [0.520]	NA	NA	−0.529 [0.800]	0.659	437
h106p11	NA	−4.318** [0.000]	−0.017 [0.490]	NA	NA	0.341 [0.280]	−0.064 [0.560]	NA	NA	NA	0.565	439

Table 2: Summary of Cox proportional hazards results for the nineteen discharge petitions in our study. The notation hXpY denotes Congress X and Petition Number Y, and : denotes interaction. For estimated coefficients squared brackets are used for p-values.

	coef	exp(coef)	se(coef)	z	p
partyd	4.632	102.728	0.4478	10.344	0.000
eucldis	−0.161	0.852	0.7793	− 0.206	0.840
chamsen	−0.061	0.941	0.0358	− 1.704	0.088
leader	0.605	1.831	0.7152	0.846	0.400
eucldis:chamsen	0.119	1.126	0.1130	1.054	0.290
eucldis:leader	−0.886	0.412	2.0890	−0.424	0.670
	exp(coef)	exp(-coef)	lower 0.95	upper 0.95	
partyd	102.728	0.00973	42.71024	247.08	
eucldis	0.852	1.17420	0.18489	3.92	
chamsen	0.941	1.06296	0.87697	1.01	
leader	1.831	0.54606	0.45083	7.44	
eucldis:chamsen	1.126	0.88778	0.90267	1.41	
eucldis:leader	0.412	2.42626	0.00687	24.73	

Table 3: Cox proportional hazards results for Petition 1 in the 106^{th} House. $N = 437$, and R^2=0.635.

	coef	exp(coef)	se(coef)	z	p
eucldis	−4.3183	0.0133	0.6208	−6.956	$3.5e-12$
chamsen	−0.0166	0.9835	0.0243	−0.682	$4.9e-01$
leader	0.3410	1.4063	0.3127	1.090	$2.8e-01$
eucldis:chamsen	−0.0637	0.9383	0.1090	−0.585	$5.6e-01$
	exp(coef)	exp(-coef)	lower 0.95	upper 0.95	
eucldis	0.0133	75.058	0.00395	0.045	
chamsen	0.9835	1.017	0.93772	1.032	
leader	1.4063	0.711	0.76194	2.596	
eucldis:chamsen	0.9383	1.066	0.75775	1.162	

Table 4: Cox proportional hazards results for Petition 11 in the 106^{th} House. $N = 439$, and R^2=0.565.

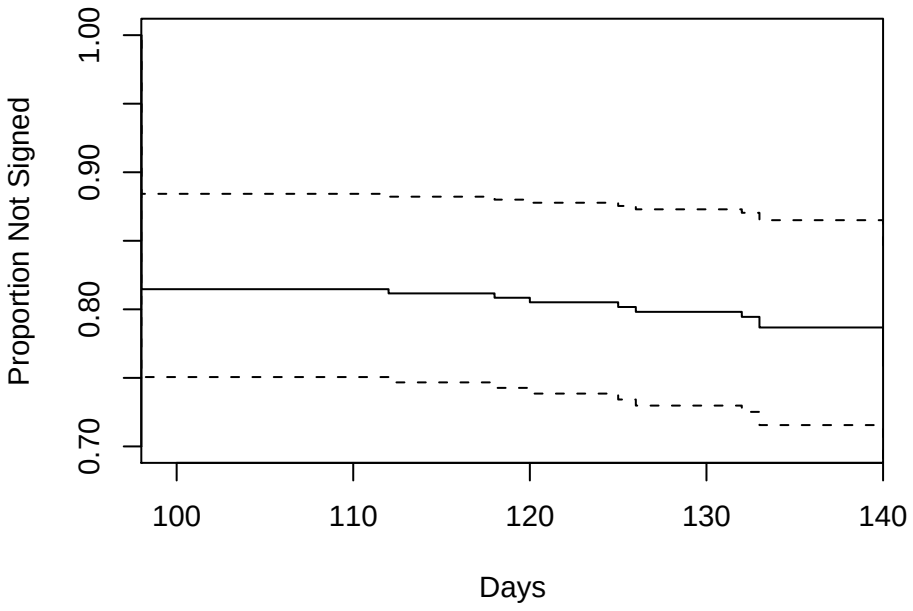

Figure 1: Estimated baseline survival function for Petition 1 in the 106^{th} House. The dotted lines denote the 95% confidence envelope.

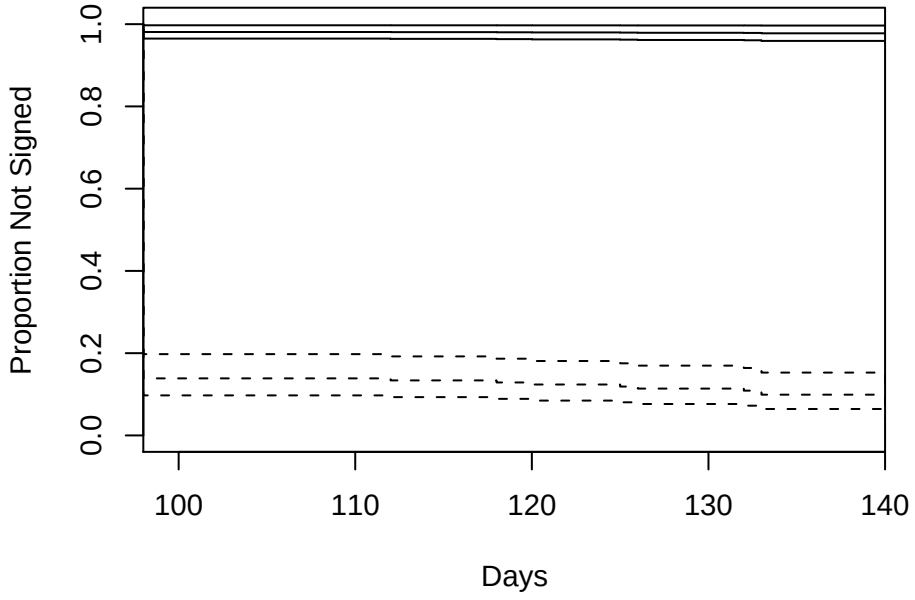

Figure 2: Estimated survival functions for Republicans (top) and Democrats (bottom) for Petition 1 in the 106^{th} House. The surrounding lines denote the 95% confidence envelope.

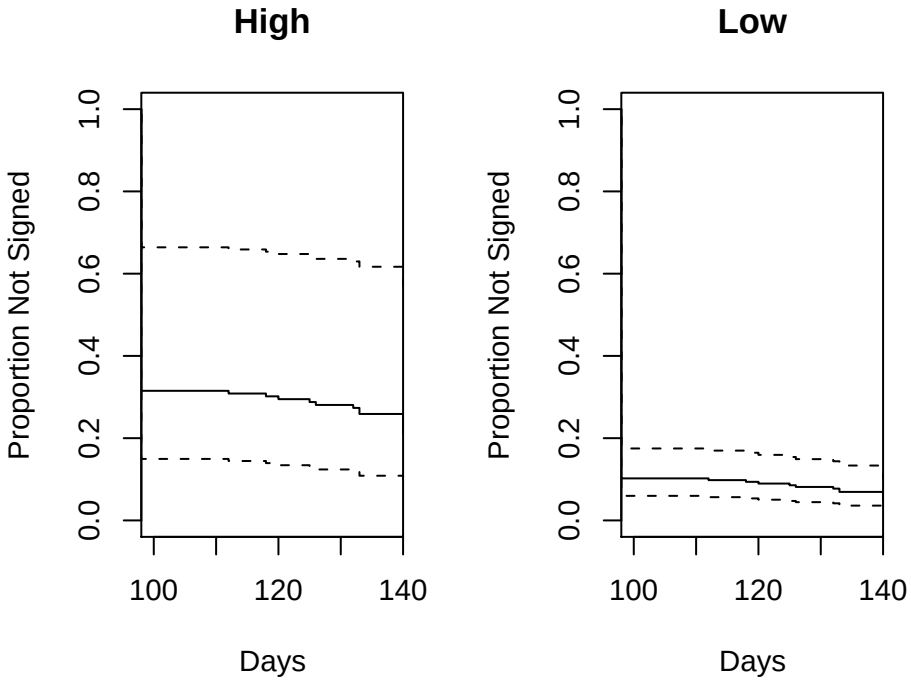

Figure 3: Estimated survival function for high and low chamber seniority for Petition 1 in the 106^{th} House. The dotted lines denote the 95% confidence envelope.

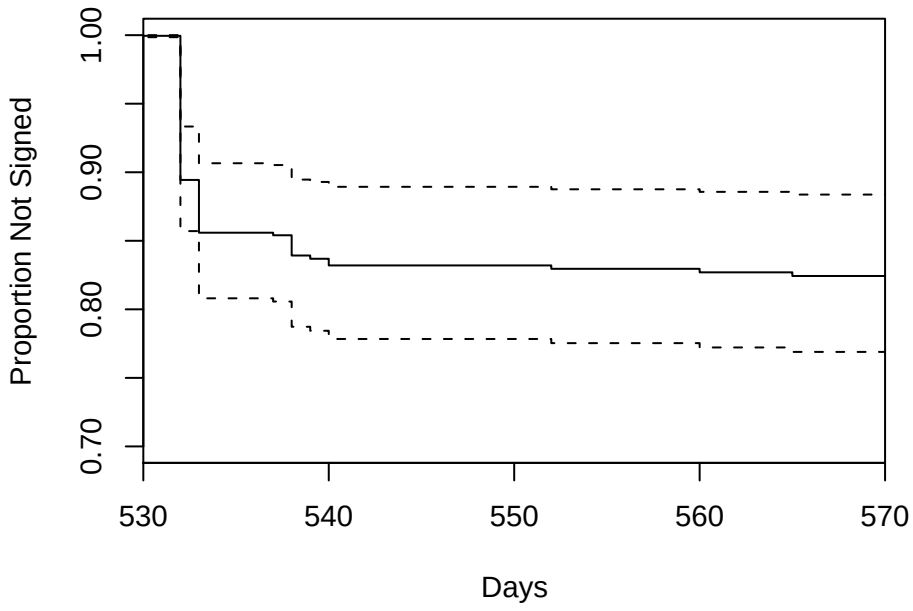

Figure 4: Estimated baseline survival function for Petition 11 in the 106^{th} House. The dotted lines denote the 95% confidence envelope.

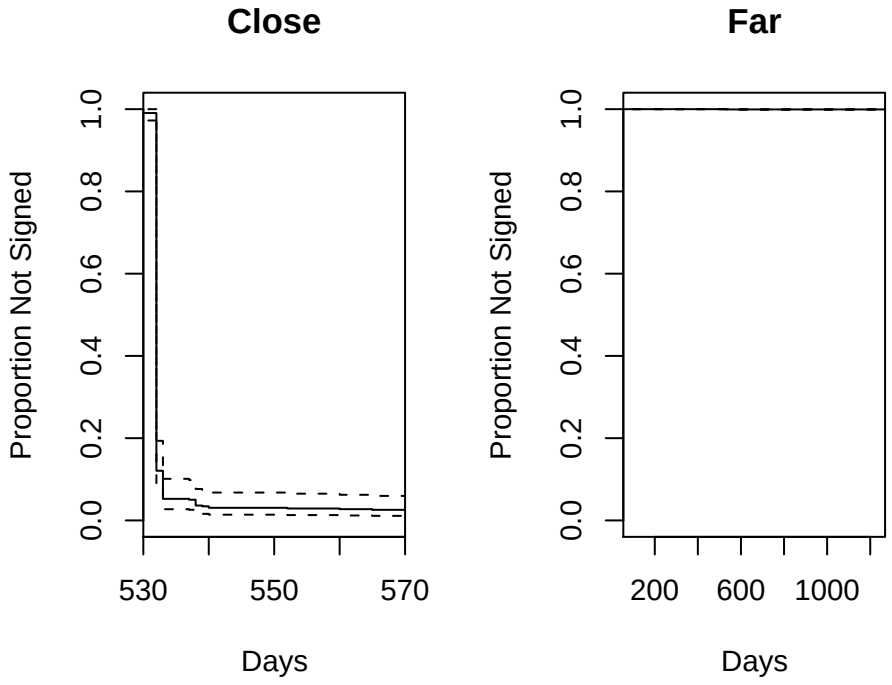

Figure 5: Estimated survival functions for ideologically close and far members for Petition 11 in the 106^{th} House. The dotted lines denote the 95% confidence envelope.