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## Congressional Careers, Committee Assignments, and Seniority Randomization in the U.S. House of Representatives\*

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### Abstract

This paper estimates the effects of initial committee seniority on the career histories of Democratic members of the House of Representatives from 1949 to 2006. When more than one freshman representative is assigned to a committee, positions in the seniority queue are established by lottery. Randomization ensures that queue positions are uncorrelated in expectation with other legislator characteristics within these groups. This natural experiment allows us to estimate the causal effect of seniority on a variety of career outcomes. Lower ranked committee members are less likely to serve as subcommittee chairs on their initial committee, are more likely to transfer to other committees, and have fewer sponsored bills passed in the jurisdiction of their initial committee. On the other hand, there is little evidence that the seniority randomization has a net effect on reelection outcomes or non-committee bills passed.

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In this paper we examine the effects of the committee seniority system in the U.S. House of Representatives on the career histories of individual legislators. The committee assignment process used by the Democratic Caucus in the House of Representatives provides us with a rare opportunity to sort out the consequences of seniority for the behavior of individuals while avoiding confounding effects due to chronological age, experience or other characteristics. When members are first assigned to *committees*, seniority ranks are determined by lot within groups of representatives that have equivalent *chamber* seniority. The randomization process ensures that, in expectation, seniority is uncorrelated with pre-treatment characteristics of committee members. This natural experiment allows us to estimate the causal impact of differences in seniority on a variety of career history outcomes.

### Seniority and Legislative Careers

The seniority system in the U.S. House of Representatives is a collection of formal and informal rules and norms according to which long-serving members possess more procedural privileges and control more resources than do their junior colleagues. Two key practices constitute the foundation of the seniority system for House committees (Goodwin, 1959; Polsby, Gallagher and Rundquist, 1969). First, once a member is appointed to a committee, that member is transferred to another committee only with his or her consent.<sup>1</sup> Second, the majority-party

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<sup>1</sup>Exceptions arise when a change in the composition of the chamber requires one of the parties to reduce the number of its partisans on a committee (which rarely occurs because party leaders typically negotiate a larger committee size to accommodate compositional changes in the full House) or when a committee is abolished.

member with the longest service on a committee is presumed to have the first claim on the chair of that committee. These and other seniority-based practices are operationalized in the House by assigning ranks to each member of the party caucus on a particular committee at the time of initial assignment to the committee. Members move up the committee queue as more senior members leave the committee due to transfer, electoral defeat, retirement, or death. Thus, seniority is committee-specific; the seniority system consists of a set of parallel queues in which members advance at different speeds.

Most existing empirical studies of the congressional seniority system use seniority as an indicator of the relative power of party leaders and rank-and-file legislators within the institution (Polsby, 1968; Crook and Hibbing, 1985; Cox and McCubbins, 1991), or examine the representativeness of committee leadership cadres produced by the seniority system (Hinckley, 1969). Fewer studies consider the effects of the seniority system from the perspective of individual legislators embedded within it.

For legislators, positions on congressional committees represent assets that they can use to advance their electoral and policy objectives. All else equal, holding a higher position in a seniority queue is at least as valuable as a lower position. If seniority norms are followed, all members expect a higher-ranked member to become chair before a lower-ranked member. Likewise, since the Subcommittee Bill of Rights, the higher-ranked member will be advantaged in bidding for subcommittee chairs. The discounted present value of a given queue position depends in part on the political fortunes of the legislator, the fortunes of those above her in the queue, the status of her party in the legislative chamber, and the possibility that the seniority system itself will change in a manner that affects the value of her queue position. She takes the expected value of her committee ranks into account when making decisions about her political career: whether to transfer to another committee, to seek higher office, or to ride off into the sunset (possibly with a detour to K Street).

Given a disadvantageous queue position, legislators have a number of potential responses. One possibility is to transfer to a different committee.<sup>2</sup> If the value of a committee assignment depends on a member's place in the seniority queue, then members holding lower queue positions are more likely to transfer. It is not clear *a priori* when during a legislator's career we would expect to see strong seniority effects on the probability of transfer. On the one hand, representatives who "lose the lottery" (i.e., who are randomized into inferior queue positions within their committee cohort) might respond quickly to their *ex post* position in a committee queue in order to start accumulating seniority on a different committee. On the other hand, almost every legislator involved in a randomization is located far down the seniority queue; most are freshmen. In that position, members face considerable uncertainty about the career prospects of those ahead of them in the queue. They might wait before transferring in the hope that this uncertainty will resolve in their favor.

Member career calculations could, as a second possibility, induce them to respond to a disadvantageous queue position by leaving Congress. As a general matter, low queue positions should not affect the electoral prospects of an incumbent legislator. After all, voters cannot reverse the effects of the randomization by defeating an incumbent. Electing a challenger implies that the district's next representative will rank lower on the same committee or will be on a different committee altogether. Indeed, one of the main effects of a legislative seniority system is to advantage all incumbents relative to their challengers (McKelvey and Riezman, 1992; Holcombe, 1989). Any effect of differences in seniority should therefore operate through

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<sup>2</sup>Shepsle (1978) presents data on the congresses from 1958–74 showing that half of all freshmen seek transfers or the acquisition of additional assignments in their *first non-freshman term*. By the time members are in their fifth term or higher, 95% have sought to alter their freshman portfolio in some manner, some multiple times.

the career decisions of legislators rather than the electoral judgments of constituents. To the extent that losing the seniority lottery makes a committee assignment marginally less valuable, losers may find other outside opportunities, such as statewide office, relatively more attractive.<sup>3</sup>

## The assignment process

Our research strategy takes advantage of the process by which the Democratic Caucus assigns seniority ranks to newly appointed committee members. For our purposes, it is useful to divide the assignment process into two parts: committee assignment and seniority assignment. The process of assigning new and returning representatives to committees involves strategic behavior on the part of both members and the Democratic party body responsible for committee assignments (Shepsle, 1978; Frisch and Kelly, 2006). As a result, the process of committee assignment is non-random; it depends on a variety of observable and non-observable characteristics of individual legislators.

The Democratic Committee on Committees<sup>4</sup> determines seniority ranks only after it assigns members to committees.<sup>5</sup> Members returning to the committee retain their position in the queue, moving up to a higher rank if members above them do not return to the committee. Below the returning members are, in priority sequence, newly appointed members who used to serve on the same committee, followed by non-freshmen representatives who transfer on to the committee for the first time during their current tenure in the House, then freshmen representatives who served in the House (but not the committee) in some earlier period, and finally any freshmen with no prior service in the House.

After these priority rules are applied, ties often remain between representatives within these categories (especially the last). The Democratic Committee on Committees breaks these ties through a randomization process, literally drawing names out of a box.<sup>6</sup> We call these groups of representatives with equivalent records *randomization groups*. Representatives retain the ordering established by this randomization throughout their service on the committee.

The randomization procedure used to break ties is key to our empirical strategy. Each time the Democratic Committee on Committees randomizes the rankings within a group of representatives, it in effect conducts a natural experiment. This ensures that in expectation any pre-existing attributes of representatives that could influence later career trajectories – their political experience or skill, the competitiveness of their districts, the influence of their state delegation within the caucus – are uncorrelated with the rank that they receive within the randomization group. Existing studies have not exploited this aspect of the assignment process, which allows for more reliable causal inferences about the effects (or absence thereof) of the seniority system on member careers.

<sup>3</sup>In contrast, representatives who are fairly close to the top of a seniority queue may be tempted to remain until those assigned to places higher in the queue have left the scene. Hall and van Houweling (1995) find some suggestive evidence: representatives who were second in their full committee queues in 1994 were more likely to run for reelection than other members, particularly when they were younger than the committee chair (after controlling for the main effect of age).

<sup>4</sup>Prior to 1975, this was the Democratic membership of the House Ways and Means Committee; after that point, this role was assumed by the Steering Committee of the Democratic Caucus.

<sup>5</sup>Some vacancies may remain unfilled. Others are filled provisionally (called *waiver appointments*); these are filled only for the congress in question by granting a member a waiver to serve even if in nominal violation of Caucus rules governing committee service.

<sup>6</sup>One of the authors interviewed a senior advisor to Speaker Pelosi who stated that he personally organized the randomizations by writing the names of newly assigned members on slips of paper, placing them in a box, and having a member of the Committee on Committees draw slips from the box to establish the ordering. E-mail correspondence with an advisor to Speaker Foley and Minority Leader Gephardt confirmed that similar procedures were used during their time in office.

## Data and Models

Our research strategy requires us to identify groups of two or more Democratic representatives with equal seniority assigned to a single committee at the same time. We use data on committee assignments from the 80th to 108th Congress.<sup>7</sup> We identify groups of legislators who (1) received new assignments to a committee on the same date, (2) had equivalent chamber seniority, and (3) were assigned consecutive seniority ranks on their new committees. In the interest of making the observations used to estimate the effects of seniority on congressional careers more homogenous, we exclude assignments to select committees or standing committees subject to term limitations. We also remove randomization groups from the three exclusive committees (Appropriations, Rules, and Ways and Means) as well as those groups composed of non-freshmen.<sup>8</sup> This leaves freshmen randomization groups from the major and minor legislative committees.

After imposing these restrictions, we have 1348 observations in 308 freshman randomization groups, summarized in Table 1. Each committee assignment that falls in a randomization group constitutes an observation; members randomized on two or more committees appear in the dataset more than once. Both the number of congresses in which randomization takes place and the total number of freshmen assigned varies dramatically across committees. In the data, there are no committees for which freshman randomization took place in all 29 congresses; Banking, Interior, and Science came closest with 24 each (see second row of Table 1). In nearly all cases, freshmen committee members received ranks far from the top of the committee queue; more than 97% ranked tenth or lower at the time of their initial assignment.

Each randomization group constitutes a small experiment on the effects of differences in seniority on career outcomes. The process that generates those outcomes is quite noisy, so we aggregate across these experiments and model the outcomes as a function of the queue position assigned by lot. Randomization groups differ in size (ranging from 2 to 15 members) and in the number of returning members occupying positions above them in the queue. To address this heterogeneity, we rescale the assigned seniority ranks within each randomization group by subtracting the median rank in the group.<sup>9</sup> This ensures that both the median and mean rescaled rank within each randomization group is zero. Some normalization is necessary because the nominal ranks assigned to the freshmen in a randomization group are correlated with contextual factors that could introduce bias.<sup>10</sup>

To check the effectiveness of the randomization in achieving balance, we estimated a model with rescaled ranks as the outcome and pre-assignment covariates as predictors. As expected, these covariates (including age, margin of victory, delegation size, and prior political experience) do not predict rescaled ranks individually or as a group.<sup>11</sup>

To estimate the effect of differences in seniority, we use generalized linear models appropriate to the nature of the outcome of interest.<sup>12</sup> Randomization balances the pre-assignment characteristics in expectation, so we do not control for these characteristics in the results

<sup>7</sup>This data comes from the committee assignment datasets collected by Garrison Nelson, Charles Stewart, and their collaborators.

<sup>8</sup>Deletion of these observations removes less than 20% of the data and makes the remaining observations substantially more homogenous. Moreover, including them in the analysis does not affect the substantive conclusions presented in this article (details are available in the online appendix). We hesitate to extend our inferences to the exclusive committees or to non-freshmen randomization groups because these groups contribute so little information to the overall estimates.

<sup>9</sup>For example, if a three-member randomization group was assigned ranks 19, 20, and 21 on a particular committee, we rescale their ranks to -1, 0, and 1. Negative ranks correspond to more senior queue positions.

<sup>10</sup>For example, the number of Democrats on each committee increases in tandem with the number of Democrats in the House as a whole. As a result, freshmen members joining the committee receive lower nominal ranks in congresses with large Democratic caucuses.

<sup>11</sup>Details are available in the online appendix.

<sup>12</sup>All of the analyses presented in this paper were conducted using the R statistical computing environment. Replication code and data are available from the authors on request.

reported here.<sup>13</sup> We do, however, assume linearity and additivity on the scale appropriate to each model when aggregating across randomization groups. While we would not necessarily expect the effect of seniority to be linear throughout the whole range of possible ranks, we believe that linearity is a reasonable assumption for the subset of ranks that freshmen actually receive.<sup>14</sup> Although linearity, additivity, and other modeling assumptions impose a fair amount of structure on the problem, the balance implied by randomization means that our estimates depend less on our modeling choices than they would in traditional observational settings (Ho et al., 2007).

It is important to note that our inferences are conditional on the members actually assigned to each committee. Members receive committee assignments on the basis of a variety of characteristics. As a result, one cannot assume that the observed effects of seniority would be the same if the Committee on Committees randomly assigned members to committees.

This counterfactual is not particularly interesting, however, because the Democratic Caucus doubtless will never choose to make committee assignments without taking political considerations such as the expressed preferences of members into account. To the extent that the committee assignment process is essentially stationary over time (that is, the characteristics of freshman legislators assigned to particular committees remain consistent across congresses), we can use the available data to make inferences about the effects of seniority on the careers of those representatives who are assigned to particular committees.

## Findings

### Seniority and subcommittee chairs

We first estimate the effect of differences in initial seniority on the probability that a newly assigned committee member serves as a subcommittee chair on that committee at some point in the legislator's career.<sup>15</sup> This outcome is closely linked to the seniority system; before the reforms of the 1970s, senior members of the full committee held most subcommittee chairs, while the bidding system for subcommittee chairs implemented after the reforms gives senior committee members the first opportunity to fill open positions. We estimate the model using randomization groups from the 80<sup>th</sup>–105<sup>th</sup> Congress, instead of the full sample extending to the 108<sup>th</sup> Congress, in order to have a dozen years of career history for those members still serving in Congress.<sup>16</sup>

As expected, members randomized into more senior ranks on their committees are more likely to serve as subcommittee chairs on those committees. To characterize the magnitude of this effect, we calculate the expected probability (using simple logistic regression) of serving as a subcommittee chair for the most and least senior member of a five-member randomization group (in other words, members separated by four ranks). Based on the estimates generated by the model, the most senior member of the randomization group becomes a subcommittee chair with probability 0.324, while the least senior member becomes a subcommittee chair with probability of only 0.209; this difference of 0.115 is the seniority effect within a five-member randomization group. The first row of Figure 1 illustrates this effect along with a simulation-based 95% confidence interval for the difference in probability.<sup>17</sup> An effect of this magnitude

<sup>13</sup>Including covariates can increase the precision with which the effects are estimated. We re-estimated the models reported here using a number of pre-assignment characteristics. The estimates produced by these models were neither substantively different nor more precise than the results reported here; they are available in the online appendix.

<sup>14</sup>In other words, although we expect that the difference between ranking first and second is larger than the difference between second and third, it is unlikely that the effect of being ranked 14<sup>th</sup> vs. 15<sup>th</sup> is much different from 15<sup>th</sup> vs. 16<sup>th</sup>.

<sup>15</sup>We identified members who served as subcommittee chairs using various editions of the *Congressional Directory*.

<sup>16</sup>In 9 cases out of 1268, members retain their initial committee assignments but have not yet served as subcommittee chairs. We treat these as zeros for this analysis, but our results are not sensitive to other assumptions.

implies that differences in initial seniority play an important role in determining which members in a randomization group attain leadership positions on the committee.

The estimated seniority effect on the probability of becoming a subcommittee chair captures both the (direct) mechanics of the seniority system and the (indirect) behavioral responses of those embedded within it. The time that members must serve on a committee before gaining a subcommittee chair allows for two indirect channels through which the randomization may affect the probability of becoming a subcommittee chair. Members faced with poor queue positions may transfer more frequently to other committees than those who do well in the lottery. They may also be less likely to remain in the House. Having confirmed that the total effect is substantively and statistically significant, we now examine these indirect mechanisms in more detail.

### Seniority and transfers

We estimate the effect of seniority on the probability that members leave the committee to which they have been assigned, either to transfer to a different committee or to reduce their total number of committee assignments. We explore the probability and timing of transfers by defining both short- and long-term transfer outcomes. The first outcome measures transfers occurring through the organization of committees in the sophomore terms of Democratic representatives who were initially randomized to seniority ranks. Members who transfer during their first term or who do not return to their committees at the start of the second term are coded as 1, while all others are coded as 0. A second outcome of interest is whether legislators transferred off of their initial committee at any point during their congressional service. Again, this variable is coded 1 if a member left his or her committee of first assignment while remaining in the House. Members who remain on the committee until they leave the House due to death, defeat, or retirement are coded as zeros.<sup>18</sup> With this coding convention, career transfers are a superset of first-term transfers.

We do not find strong evidence of a seniority effect on transfer behavior in the short term. As shown in the second row of Figure 1, plausible estimates of the seniority effect in a five-member group (as measured by a 95% confidence interval) range from a 0.03 increase in the probability of transfer for the most senior member to a 0.05 decrease in probability, relative to the least senior member of the group.

Turning to transfers over the course of a career (third row of Figure 1), we do find evidence that members lower in the queue are more likely to transfer off their initial committees. Returning to our example of a five-member randomization group, the probability that the lowest-ranked member transfers at some point during his or her career is approximately 0.437, while the probability for the highest-ranked member is only 0.370. This seniority effect of  $-0.067$  is substantively smaller than the effect of seniority on the probability of serving as subcommittee chair (0.115), both because the implied difference in probability is smaller and because the baseline probability of transfers is higher. To put the magnitude of this effect in context, this difference (0.067) is comparable to the difference in the probability of transfer between members assigned to their first-choice committee and those assigned to committees that were not their first choice.<sup>19</sup>

<sup>17</sup>These estimates were generated using the Zelig package for R, which uses simulation to calculate point estimates and confidence intervals for quantities of interest that are not model parameters.

<sup>18</sup>As with subcommittee chairs, we restrict the analysis of career transfer outcomes to randomization groups in the 80<sup>th</sup>–105<sup>th</sup> Congresses. In 67 cases, members remained on their initial committees at the end of the 110<sup>th</sup> Congress. Transfers after the sixth term are quite rare, so we treat these cases as non-transfers.

<sup>19</sup>Strictly speaking, the estimated difference in transfer probability associated with assignment to a legislator's first-choice committee does not estimate a causal effect, because the Committee on Committees does not randomly assign members to receive their first-choice committees. Frisch and Kelly (2007) provides data on committee requests; details of the calculation are provided in the online appendix.



These results demonstrate that seniority influences the transfer behavior of Democratic members of Congress over the course of their careers. The absence of a statistically significant effect on transfers during the first year could arise in one of two ways. The transfer process may be too noisy to recover an effect after only one term. On the other hand, seniority may influence transfer behavior more strongly after legislators know more about their prospects on their current committees. We obtain suggestive evidence by examining the cumulative proportion of members who have transferred after a given period. To make such an analysis tractable, we divide the dataset based on whether the member was in the upper or lower half of his or her randomization group.<sup>20</sup> As seen in Figure 2, the cumulative proportions of members who have transferred are essentially identical in the two groups through the organization of committees in the second term. This is consistent with our estimates for the effect of seniority on short-run transfer behavior. In the remainder of second and third terms, however, the proportion of members who have transferred in the less senior group increases much faster than the proportion in the more senior group. From the fourth term on, transfers become exceedingly rare and the curves are essentially parallel. This implies that the strongest effects of seniority on transfer behavior occur during the second and third terms, after some of the uncertainty about the prospects of higher-ranked members has been resolved.

### Seniority and reelection

Having shown that the results of seniority lotteries affect the career paths of Democratic legislators within the House, we now estimate the effects of differences in seniority on the probability that members remain in the House. We first consider whether the randomization affects the probability that a member is elected to a second term in Congress. Representatives who serve a second term are coded as 1, while those who do not seek reelection or who are defeated at the polls are coded as 0. Figure 1 (fourth row) shows that there is little difference in the estimated probability of reelection to a second term; in a five-member group, the estimated difference between the most senior and least senior member is approximately  $-0.01$  with a 95% confidence interval of  $(-0.05, 0.03)$ . We also look at longer-term reelection outcomes (Figure 1, fifth row). In our dataset, the median length of continuous service is five terms. Using data from members elected to the 80<sup>th</sup>–105<sup>th</sup> Congresses, we estimate the effects of differences in initial seniority on the probability that a member's tenure exceeds the median. Again, the estimated effects are small – approximately  $-0.01$  for our five-member randomization group – and statistically insignificant.

The large amount of data and the confidence that comes from randomization across pre-treatment characteristics enables us to demonstrate that seniority has essentially no effect on members' reelection prospects. These results are consistent with theoretical views of seniority as a protection system for the generic incumbent and thus independent of the outcome of the seniority lottery. The results also suggest that differences in seniority do not affect member decisions to remain in the House.

### Seniority and legislative production

Finally, we turn to the legislative production of Democratic members of Congress assigned to committees in randomization groups. Legislative output has many dimensions, all of which are difficult to quantify. We use a rough measure: the number of bills sponsored by a member of Congress that are approved by the House of Representatives during the legislator's career. This data is available for the 80<sup>th</sup>–106<sup>th</sup> Congresses from the Congressional Bills Project compiled by Adler and Wilkerson (2007).

<sup>20</sup>Dividing the data in this way ensures that each randomization group contributes equally to the two subsets, so that differences in transfer behavior are not due to the determinants of the size of the randomization group. This analysis excludes the 134 members ranked in the middle of randomization groups with odd numbers of freshmen.

Modeling bill production requires a more complicated statistical approach. Bill counts have extra-Poisson variability, and the total number of bills is not observed for members who remained in office beyond the 106th Congress.<sup>21</sup> As a result, we use a censored negative binomial regression model (Caudill and Mixon, 1995) that accounts for these characteristics of the data. As before, we estimate the model using randomization groups from the 80<sup>th</sup>–105th Congresses, so that the data contains at least two terms of bill production for all censored observations. Based on the model, the average number of sponsored bills passed by the House is approximately 11.1 over the course of a member's career. In a five-member randomization group, the most senior member expects have 11.6 bills passed by the House, while the least senior member expects to have 10.7 bills passed. As shown in Figure 3, this expected difference of approximately .9 bills is not statistically significant at the .05 level.

To explore this difference further, we divide bills into those referred to the member's initially assigned committee and those referred to other committees. Approximately 80% of bills reported by committees are sponsored by a committee member and such bills are much more likely to be approved by the whole House, which increases the likelihood of a seniority effect in this subset of bills. Again using the censored negative binomial model, we find an effect in committee-referred bills, but not in bills referred to other committees. The most senior member of a five-member group expects to have five bills referred to his or her initial committee and passed by the House, while the least senior member only expects to pass 3.6 bills through his or her initial committee. This difference is statistically distinguishable from zero at the .05 level, but is not estimated precisely, with plausible effect sizes ranging from zero to three additional bills. The estimated difference in the number of committee-referred bills passed by the House is larger than the difference in the total number passed by the House. This is reflected in the estimated negative (but non-significant) effect on non-committee-referred bills. These results suggest that lower productivity in bills referred to other committees may partially offset the increased productivity of more senior members on their initial committees, but this conclusion is tentative given the noise in the data.

Several factors contribute to greater legislative production by more senior committee members. The results discussed above demonstrate that more senior members are more likely to become subcommittee chairs and thus have legislative responsibilities that accompany those positions. Moreover, more senior members are less likely to change committees and shift their interests to other legislative areas. This result does not appear to be due to differences in time served, because initial differences in seniority do not affect total time in the House.

## Conclusion

The natural experiment created by the practice of randomly assigning committee seniority within groups of freshmen representatives provides a unique opportunity to understand how the committee seniority system affects the careers of Democratic members of Congress. We have focused on Democratic freshman assignments to major and minor legislative committees, which provide the vast majority of cases where randomization took place, while showing (in the appendix) that our results are not sensitive to the inclusion of randomization groups from exclusive committees or consisting of non-freshmen. First, as we expect from the simple mechanics of the seniority system, freshmen who receive positions closer to the top of the queue are more likely to chair subcommittees on the committees to which they were initially assigned. Second, representatives randomized to more junior queue positions are more likely

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<sup>21</sup>Note that we do not attempt to control for the length of time that members serve in the House because this is determined after the assignment of seniority ranks. While the results of the previous section suggest that differences in seniority do not affect tenure in office, controlling for the length of time that members have to introduce bills after initial seniority ranks are determined makes a causal interpretation more difficult.

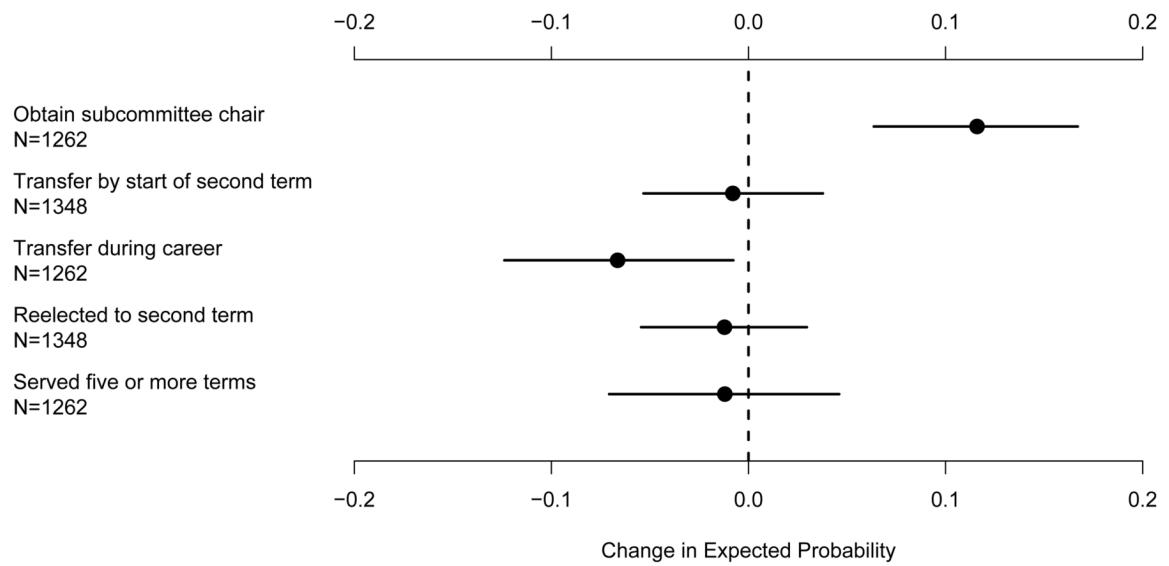


to transfer to a different committee. This appears to be a rational response to a lower present-value assessment of their committee position; they have less to lose by moving to a new committee. The effect of seniority differences on transfers appears to be the strongest in the second and third terms, when members have a better sense of their future prospects in their initial queue. Finally, we find that random assignment to a more senior position on a committee increases the productivity of a legislator on topics under that committee's jurisdiction, as measured by the number of sponsored bills passed by the House. These results suggest that winning the seniority lottery provides incentives for members of Congress to focus their legislative activities on their initial committee assignments. On the other hand, differences in the seniority ranks assigned to freshmen do not appear to affect the length of time that members serve in the House, nor do these differences significantly affect their legislative success in areas outside of their initial committee jurisdictions.

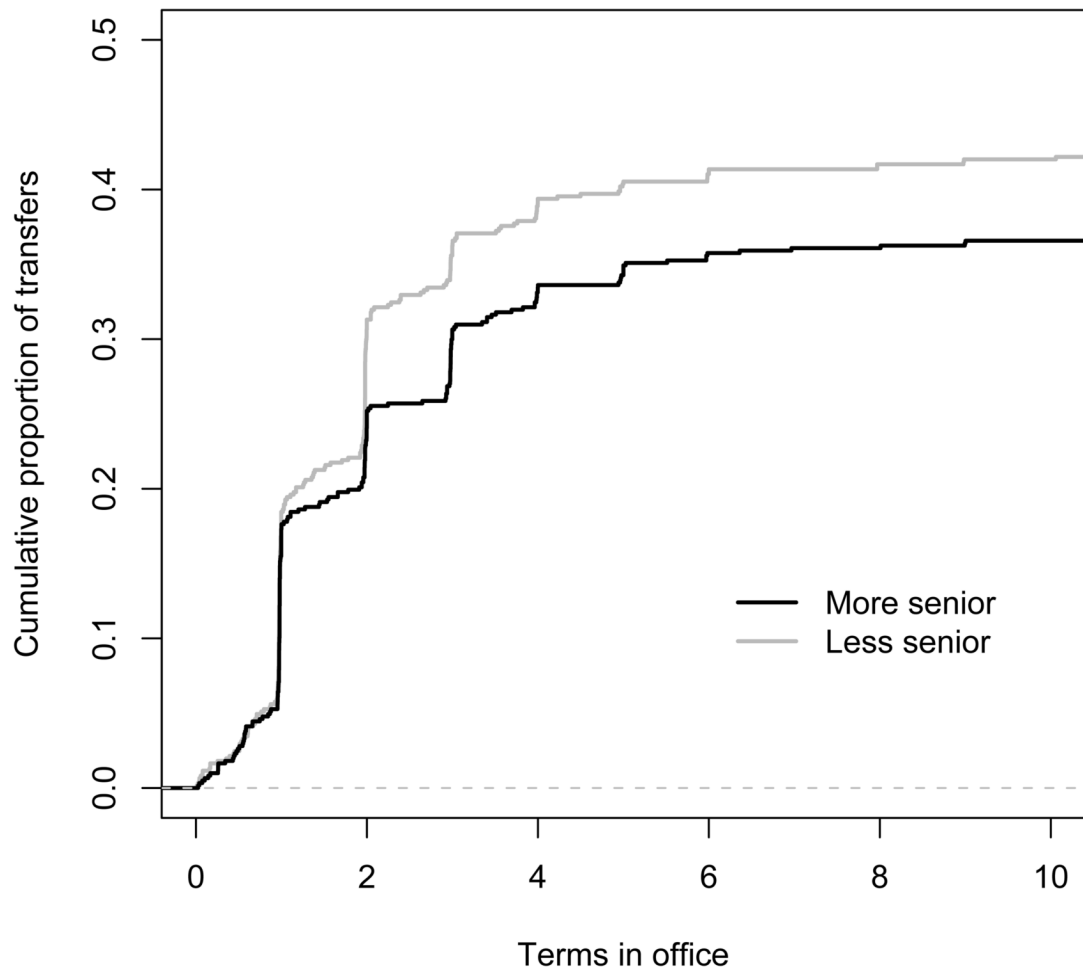
## References

- Scott, Adler E.; Wilkerson, John. Congressional Bills Project: 1947–2000. 2007. Computer file, downloaded from <http://congressionalbills.org/>
- Caudill, Stephen B.; Mixon, Franklin G., Jr. Modeling Household Fertility Decisions: Estimation and Testing of Censored Regression Models for Count Data. *Empirical Economics* 1995;20(2):183–196. [PubMed: 12320575]
- Cox, Gary W.; McCubbins, Matthew D. *Legislative Leviathan: Party Government in the House*. Berkeley: University of California Press; 1991.
- Crook, Sara Brandes; Hibbing, John R. Congressional Reform and Party Discipline: The Effects of Changes in the Seniority System on Party Loyalty in the U.S. House of Representatives. *British Journal of Political Science* 1985;15(2):207–226.
- Frisch, Scott A.; Kelly, Sean Q. *Committee Assignment Politics in the U.S. House of Representatives*. Norman, Okla: University of Oklahoma Press; 2006.
- Frisch, Scott A.; Kelly, Sean Q. House Committee Request Data, 80<sup>th</sup>–103rd Congress. 2007. Computer file, downloaded from <http://purple.niagara.edu/sqkelly2/Data%20Page.htm>
- Goodwin, George, Jr. The Seniority System in Congress. *American Political Science Review* 1959;53(2):412–436.
- Hall, Richard L.; van Houweling, Robert. Avarice and Ambition in Congress: Representatives' Decisions to Run or Retire from the U.S. House. *American Political Science Review* 1995;89(1):121–136.
- Hinckley, Barbara. Seniority in the Committee Leadership Selection of Congress. *Midwest Journal of Political Science* 1969;13(4):613–630.
- Ho, Daniel E.; Imai, Kosuke; King, Gary; Stuart, Elizabeth A. Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference. *Political Analysis* 2007;15:199–236.
- Holcombe, Randall G. A Note on Seniority and Political Competition. *Public Choice* 1989;61(3):285–288.
- Imai, Kosuke; King, Gary; Lau, Olivia. Zelig: Everyone's Statistical Software. R package version 3.1. 2006. URL: [GKing.Harvard.Edu/zelig](http://GKing.Harvard.Edu/zelig)
- McKelvey, Richard; Riezman, Raymond. Seniority in Legislatures. *American Political Science Review* 1992;80(4):951–965.
- Nelson, Garrison. Committees in the U.S. Congress, 1947–1992. 2005. Computer file, downloaded from <http://web.mit.edu/17.251/www/data%5Fpage.html>
- Polsby, Nelson. The Institutionalization of the U.S. House of Representatives. *American Political Science Review* 1968;62(1):144–168.
- Polsby, Nelson W.; Gallagher, Miriam; Spencer Rundquist, Barry. The Growth of the Seniority System in the U.S. House of Representatives. *American Review of Political Science* 1969;63(3):787–807.
- R Development Core Team. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing; 2007. URL: <http://www.R-project.org>

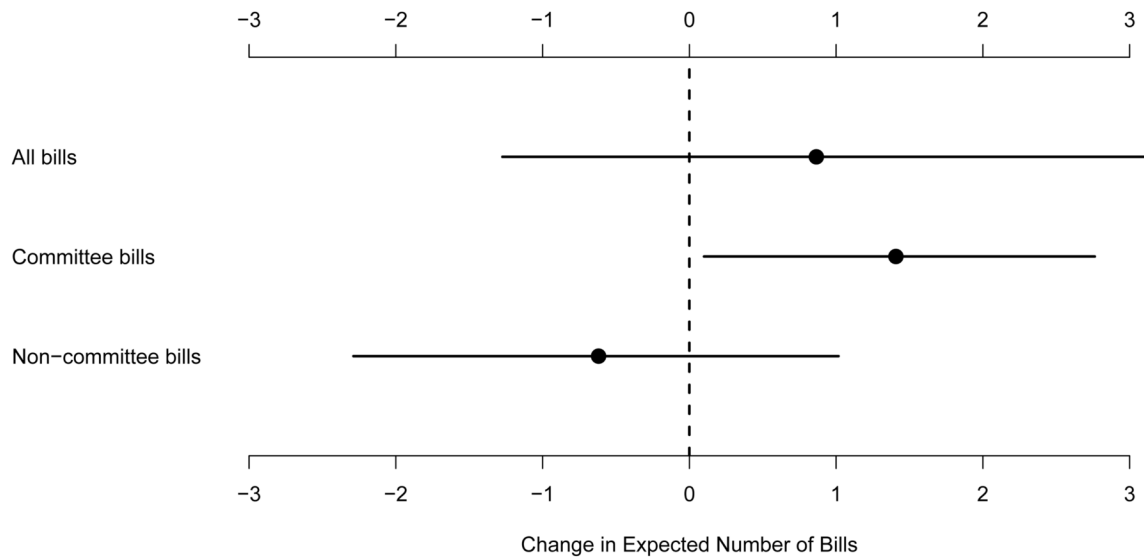
- Shepsle, Kenneth. *The Giant Jigsaw Puzzle: Democratic Committee Assignments in the Modern House*. Chicago: University of Chicago Press; 1978.
- Stewart, Charles; Woon, Jonathan. *Congressional Committee Assignments, 103rd to 109th Congresses, 1993–2005*. 2005. Computer file, downloaded from <http://web.mit.edu/17.251/www/data%5Fpage.html>
- United States. *Official Congressional Directory*. Washington: U.S. G.P.O.; 1947–2008.



**Figure 1. Estimated effects of four-rank difference in initial seniority on probability of attaining career outcomes**  
 Point estimates and 95% confidence intervals for change in the expected probability of indicated event due to change from the least senior to the most senior member of a five-person randomization group. Estimates based on logistic regression results (available in the online appendix) and generated by simulation from the sampling distribution of the model parameters.



**Figure 2. Cumulative proportion of members transferring from initial committee assignment**  
Members in the more senior group (black) rank in the top half of their randomization groups, while members in the less senior group (gray) rank in the lower half.



**Figure 3. Estimated effects of four-rank difference in initial seniority on legislative production**  
 Point estimates and 95% confidence intervals for change in the expected number of bills passed due to change from the least senior to the most senior member of a five-person randomization group. Estimates based on censored negative binomial regression results (available in the online appendix) and generated by simulation from the sampling distribution of the model parameters. N=1248.

Table 1

Distribution of randomization groups and career outcomes across committees

Number of	Agriculture	Armed Services	Banking	Commerce	District of Columbia	Education	Foreign Affairs	Govt Operations	House Admin.	Interior	Judiciary	Merch.	Marine	Post Office	Public Works	Science	Small Business	Veterans	Affs	Total
Freshmen randomized to seniority ranks	110	80	124	50	16	93	58	77	20	96	58	75	68	127	120	78	98	1348		
Randomization groups	22	22	24	13	6	22	16	20	6	24	19	17	15	23	24	15	20	308		
Reps who chaired subcommittees at some point in career	40	18	28	10	1	27	24	22	1	24	19	15	13	24	32	24	26	348		
Reps who transferred off of initial committee by start of second term	11	7	27	3	7	8	8	16	7	17	8	9	30	15	31	26	23	253		
Reps who transferred off of initial committee at some point in career	38	20	57	5	7	31	15	44	10	36	16	23	38	47	59	45	56	547		
Reps who served at least 2 terms in House	92	69	111	37	10	80	51	68	14	78	51	63	52	107	101	72	88	1144		
Reps who served at least 6 terms in House	39	32	59	18	5	42	33	37	10	32	23	32	31	52	54	32	52	583		