

# PATRONAGE, CAREERS, AND PERFORMANCE IN THE FEDERAL CIVIL SERVICE: EVIDENCE FROM U.S. JUDGES\*

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**ABSTRACT.** Political connections are a pervasive method for the selection of public sector workers worldwide. Yet, the existing literature on patronage has largely focused on developing countries or drawn case studies from historical contexts. This paper analyzes the consequences of patronage in the federal civil service of the United States, which still occurs today. Focusing on the federal judiciary system from 1789 to the present and leveraging previously unused data, we use a difference-in-differences design to compare the career and performance of judges before and after the senator who recommended their nomination leaves Congress. In our preliminary results, we show that the probability of a judge to be promoted from a district court to a court of appeal decreases by up to 68% after losing the connection to their recommender. In ongoing work, we are exploring whether and how this event influences judges' productivity and sentencing decisions. This project aims to make three contributions. First, to document the consequences that the selection of public officials through patronage has in a major, developed economy. Second, to show how patronage appointments for entry-level positions can affect careers within an organization. Third, to challenge the claim that political appointments may solve biases arising from the direct election of public officials.

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## 1. INTRODUCTION

On May 6th, 2020, the Judiciary Committee of the United States Senate held a confirmation hearing for Judge Justin Walker, Senator Mitch McConnell's handpicked nominee for the appointment to the D.C. Circuit Court. This happened only six months after Judge Walker received judicial commission in the Western District Court of Kentucky, and was rated "Not qualified" by the *American Bar Association* for such role.<sup>1</sup>

Within the U.S. Judiciary – and the U.S. Federal Civil Service, more in general – exceptionally rapid promotions are neither a recent nor a party-specific phenomenon. Judge Richard S. Arnold got his seat in the U.S. Court of Appeals for the Eighth Circuit in February of 1980, only fifteen months after being first nominated to the Eastern District Court of Arkansas. On both occasions, he was strongly endorsed by the democratic Senator Dale Bumpers, for whom he had served as both a secretary and a legislative aid for six years. During the hearing for Judge Arnold's promotion, Senator Bumpers went so far as to define his skills as "legendary".<sup>2</sup>

These episodes are far from unique (Domnarski, 2009), and raise several important questions. Why does the opinion of a politician matter more than those of legal professionals when it comes to filling the ranks of the U.S. judiciary? How important are senators in shaping the careers of federal judges? And what consequences does this patronage system have on the overall efficiency, functioning, and fairness of federal courts?

Even though political recommendations are a prevalent mechanism for selecting civil servants in many countries (Evans and Rauch, 1999; Grindle, 2012), the existing literature has largely focused on developing countries (Akhtari et al., 2017; Colonnelli et al., 2020), or drawn case studies from historical contexts (Xu, 2018; Voth and Xu, 2019).<sup>3</sup> Also, extant studies tend to look at the effects of connections to parties rather than individual politicians, although the latter are often key actors in distributing appointments.

In this paper, we analyze the consequences of individual patronage in the federal civil service of the United States, a highly institutionalized spoils system that has been in place for more than two centuries. Focusing on the federal judiciary system from 1789 to present and leveraging previously

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<sup>1</sup><https://www.nytimes.com/2020/05/04/us/politics/senate-confirmation-justin-walker.html>  
<https://www.nytimes.com/2020/06/04/us/judge-justin-walker-nomination-senate.html>.

<sup>2</sup>Namely, on the Confirmation Hearing of February 7, 1980, Senator Bumpers declared that "Richard's ability to understand and express complex issues precisely and succinctly is legendary".

<sup>3</sup>One notable, recent exception is Spenkuch et al. (2021), to which we return in more detail below.

unused data, we provide an empirical assessment of the importance of connections between district court judges and the senators who recommended their nomination. More specifically, we establish a causal link between the probability of promotion of judges to courts of appeals and the tenure of their initial recommender(s). To this end, we exploit the exit of senators from Congress as a source of within-judge variation in connectedness.

Our difference-in-differences and event-study estimates reveal a strong impact of senators' tenure on the career prospects of their recommended judges. Consistent with the mechanisms of federal judicial nominations, such impact emerges in years in which judges share partisanship with the incumbent president, and would thus stand to benefit from the lobbying efforts of their senatorial patron(s). Also, the effects are concentrated on judges with a unique recommender at the beginning of their career, that is, those who simultaneously lose all ties to incumbent senators as their unique connection leaves Capitol Hill.

Namely, following the exit of their recommender, these judges experience a 68% drop in their yearly probability of promotion to the U.S. Court of Appeals. In light of a baseline probability of promotion of 1.2% in a given year when the president is of the same political affiliation, the exit of recommenders from office essentially shuts the door to a judge's advancement in the U.S. federal judiciary. Therefore, our estimated effect is likely to have first-order consequences for the composition of U.S. courts of appeal, as well as for the career incentives of U.S. district judges.

Moreover – as we document by means of mediation analyses – the effects summarized above apply irrespective of the reason for which a recommender exits office, are homogeneous across judges of different quality, and do not significantly vary by partisan affiliation. In other words, patronage dynamics are likely to be key to the career perspectives of a large number of district court judges.

To bolster the causality of our results, we implement several identification and robustness checks. First, using an event-study design, we document the absence of significant anticipation effects. Second, we tackle potential issues with standard two-way fixed effects estimators highlighted in recent work (Callaway and Sant'Anna, 2020; Imai and Kim, 2020; Sun and Abraham, 2020; De Chaisemartin and d'Haultfoeuille, 2020). After documenting that negative weights are only mildly affecting our baseline estimates, we show that results are largely similar when using the alternative estimator proposed by De Chaisemartin and d'Haultfoeuille (2020).

Finally, as far as the interpretation of our findings is concerned, we explore and rule out one relevant alternative explanation. Namely, we show that the negative effect of losing connections is

virtually identical when a recommender is replaced by a senator of the same party. This confirms that personal connections between senators and judges are what shapes the career perspectives of the latter, as opposed to a generic ideological affinity with incumbent officeholders from their state.

Overall, our findings are likely to have major implications for the performance of U.S. district court judges over the course of their career, which may go well beyond the direct effect on their promotion chances. Namely, once their recommender exits the Senate, district court judges may have significantly lower incentives to be productive on the job, given the combination of a lifetime appointment with minimum odds of being promoted (Bertrand et al., 2020). As district court judges handle about 400,000 cases per year,<sup>4</sup> the overwhelming majority of all active federal cases, their career concerns may severely impact the U.S. judicial system as a whole.

This paper makes several key contributions. First, it adds to the expanding literature on patronage, by studying the effects of this appointment scheme in the context of the federal civil service of a major developed economy. Recent studies (e.g. Xu, 2018; Colonnelli et al., 2020; Gallo and Lewis, 2012) show how patronage appointments can be detrimental for the overall quality and performance of a wide range of organizations. On top of echoing these findings, our results go one step further, by showing that patrons making entry-level appointments can be crucial for determining upper-level nominations, as well. In fact, our analyses reveal that U.S. senators may have a crucial role in the appointment of Court of Appeals judges, even though the Constitution does not give them any role in the nomination process. This links the scholarship on patronage with studies about the effect of promotion schemes on incentives and performance (Bertrand et al., 2020; Ke et al., 2018).

In this strand of scholarship, a contribution that is closely related to ours is Spenkuch et al. (2021), which documents the effects of partisanship on composition and turnover across several U.S. public agencies. Our study differs from theirs in two main respects. First, we focus on the judiciary, a sizable part of the U.S. state apparatus which is not part of the analyses in Spenkuch et al. (2021). Second, rather than looking only at the partisan affiliation of civil servants, our study is primarily interested in the personal connections between individual judges and specific senators.

Our findings also provide insights about the relative merits of different appointment procedures of U.S. high-level officials. A host of studies demonstrate how elected public officials may take suboptimal or unfair decisions due to electoral concerns. This has been repeatedly shown to be the case for elected, state-level judges (see e.g. Huber and Gordon, 2004; Besley and Payne, 2005;

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<sup>4</sup>See: <https://www.uscourts.gov/statistics-reports/federal-judicial-caseload-statistics-2020>

Berdej3 and Yuchtman, 2013). By showing that appointed judges may also face dramatic changes in their incentives, our study casts doubts about the potential for lifetime nominations to solve issues stemming from electoral cycles.

Finally, this article augments our knowledge of the overall functioning of the U.S. Federal Judiciary, and the factors that concur to shape judicial performance. In this respect, extant contributions have tended to focus on federal judicial bias stemming from judges' party affiliation (Sunstein et al., 2007; Cohen and Yang, 2019) or personal ideology (Schanzenbach and Tiller, 2008). Our study takes a different perspective, and looks at how – through affecting their career incentives – personal connections to specific political officers could also be affecting the performance of federal judges. This arguably advances our understanding of judicial behavior, by considering how incentives may change dynamically through the course of a judge's career.

The remainder of the paper is organized as follows. Section 2 gives background information on the U.S. federal court system, with particular regard to the role of home state senators in the process of nomination of district court judges. Section 3 details the sources and features of our data on federal judges and U.S. senators, as well as the procedure carried out to match them. Section 4 presents the empirical strategy adopted to identify the effects of interest. Section 5 illustrates our main results. Section 6 summarizes the upshots of a battery of sensitivity checks. Section 7 concludes and describes ongoing work.

## 2. BACKGROUND

Federal courts are in charge of dealing with both civil and criminal cases referred to the potential violation of one or more federal laws. The United States' federal court system consists of three layers: 94 district courts, 13 courts of appeals (also referred to as circuit courts), and the U.S. Supreme Court. Different from state-level judges, who are elected by citizens, federal judges are appointed for life by the President of the United States. However – while formally making the nominations – the president is far from being the only one involved in the process. This is particularly true for the entry-level position in the U.S. federal judiciary, the one of district court judge.

In fact, by a well-established custom, candidates for district court judgeships are put forward by home state senators who are from the same party as the president. Should there be no such senators, the president typically consults with other high-level officials from the state with whom

he shares partisanship, such as House representatives (Rutkus, 2016). After vetting the candidate(s) identified by home state senators, the President refers one nominee to the Senate Judiciary committee, which holds a confirmation hearing involving a question and answer session with the candidate.

Following the hearing, the committee reports the candidate to the Senate floor in one of three ways: favorably, unfavorably, or without recommendation. In the overwhelming majority of cases, candidates are reported favorably, and in a relatively quick way.<sup>5</sup> The Senate is then in charge of the final confirmation, which normally takes place by unanimous consent. On top of the U.S. Senate, the only other institution having a say over proposed candidates is the *American Bar Association* (ABA, henceforth), which issues a non-binding evaluation before the nomination is passed on to the Judiciary committee.

Although not enshrined in the Constitution, the practice of accepting names for district judgeships from home state senators has been consistently applied throughout the years, by presidents from all parties. This lead to the association of district court judges with their senatorial recommenders rather than with their nominating president. As effectively summarized by U.S. Attorney General Robert F. Kennedy, "Basically it's senatorial appointment with the advice and consent of the president" (cited in O'Brien (1986)).

Such a practice has not been immune from criticisms, on the grounds that it may favor politically connected candidates over more competent ones. As acknowledged by a U.S. Senator himself, it constitutes an "important source of political patronage" for U.S. senators (Tydings, 1977). Not surprisingly, factors concurring to the identification of candidates by senators include friendship, acquaintance, and family ties, among others (Domnarski, 2009). Furthermore, district judges are often chosen based on their political orientation, and a large majority of them were politically active before being appointed (Carp et al., 2019).

While home state senators are commonly regarded as determining only district court nominations, anecdotal evidence points to their active role in the appointment process of circuit court judges, as well (Domnarski, 2009). Notably, this qualitative evidence is largely corroborated by the official records of Congressional Hearings, which report strong written and oral endorsements of court of appeals nominees on behalf of one or more home state senator. This may imply that they suggest names for direct appointment to the circuit bench from outside the federal court system,

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<sup>5</sup>However, longer confirmation times – and occasional rejections of candidates – have been taking place in more recent decades (see Binder and Maltzman (2009)).

or that they favor the promotion of judges that they first recommended for a district court position. The latter type of dynamic – and its potential implications for the performance of U.S. district court judges – are the object of interest of the present study.

### 3. DATA

In order to study the impact of senators' tenure on the careers of federal judges, we build a novel dataset combining information on the biographies and careers of both U.S. federal judges and U.S. senators throughout the period 1789-2019.

**3.1. U.S. Federal Judges Data.** Data on judges come from the Biographical Directory of Article III Federal Judges compiled by the *Federal Judicial Center* (FJC), the research and education agency of the judicial branch of the United States Government. The directory includes the biographies of judges presidentially appointed to serve during good behavior since 1789 on the U.S. district courts, U.S. courts of appeals, Supreme Court of the United States, and U.S. Court of International Trade, as well as the former U.S. circuit courts, Court of Claims, U.S. Customs Court, and U.S. Court of Customs and Patent Appeals. The FJC data contain information on the full career of federal judges, with the specific dates of each appointment obtained throughout their tenure.

**3.2. U.S. Senators Data.** Data on senators are from three sources: the Biographical Directory of the United States Congress,<sup>6</sup> the website [voteview.com](https://voteview.com/),<sup>7</sup> and the Roster of Members of the United States Congress compiled by ICPSR.<sup>8</sup> Combining these sources provides us with complete information on the political careers of all U.S. senators, from 1789 to 2019.

**3.3. Matching of the Datasets.** In the empirical analysis that follows we focus on the sample of federal judges who, over the 230 years of analysis, were ever appointed as district court judges.<sup>9</sup> We follow their career in the district courts until either their promotion, retirement, resignation, or

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<sup>6</sup><https://bioguideretro.congress.gov>.

<sup>7</sup><https://voteview.com/data>.

<sup>8</sup><https://www.icpsr.umich.edu/web/ICPSR/studies/7803>.

<sup>9</sup>The following categories are not included in our sample: (i) judges appointed in years in which that State did not have any representative in the Senate yet; (ii) judges in the district courts of DC and Puerto Rico.

death – whichever occurs first. In doing so, we also record if and when the senator(s) who recommended their nomination left office. To this end, we transform the FJC data into an unbalanced panel at the judge-year level.

In order to identify the senator(s) who recommended the nomination of each federal judge, we match this panel with the data on U.S. senators. In particular, we link each judge to the senator – or pair of senators – who, at the time of her nomination date as district court judge, were occupying the seat(s) corresponding to the state in which she was appointed, and who were of the same party as the nominating president.<sup>10</sup>

Finally, given that our treatment of interest is the break of the connection between the judge and her recommending senator, we exclude from our analysis those judges that are appointed in states where there is no senator of the same party as the incumbent president at the time of nomination, since we do not identify any recommender in the Senate to exist in such cases.

The final sample consists of 42,715 judge-year observations, covering 2,155 judges for the time period 1789-2019. Table 1 reports summary statistics for a set of judges' characteristics. Approximately 11% of the individuals in the sample get promoted from a district to an appellate court, after an average of 10 years from the first appointment. Figure 1 displays the number of promotions in each year, which ranges from a minimum of 0 to a maximum of 7. Approximately half of the judges are appointed by a Democratic president, and half by a Republican one.

## 4. EMPIRICAL STRATEGY

To analyze the effect of connections to senators on the probability of promotion from district court to court of appeals, we start by considering the following regression model:

$$\begin{aligned}
 Promotion_{it} = & \theta_i + \tau_{ts} + \sum_{j=1}^2 \beta^j \cdot ConnectionLost_{it}^j \\
 & + \sum_{j=1}^2 \gamma^j \cdot (ConnectionLost^j \cdot SamePartyPresident)_{it} + x'_{it} \theta + \varepsilon_{it}
 \end{aligned} \tag{1}$$

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<sup>10</sup>The rationale for this matching procedure comes from the process through which senatorial recommendation of federal judges works, as detailed in Section 2 above.



where  $i$  denotes the judge,  $t$  indicates the year, and  $s$  the state. The dependent variable,  $Promotion_{it}$ , is equal to 1 if district court judge  $i$  became an appellate court judge at year  $t$ , and 0 otherwise. Since a demotion from the upper to the lower level court is not an option, time is not defined after  $t$ . This means that appointment to court of appeals is an absorbing state: after promotion, the judge drops out of the sample.

$ConnectionLost_{it}^j$  is a dummy variable that takes value 0 if recommending senator  $j \in \{1, 2\}$  is still in office at year  $t$ , and 1 otherwise.<sup>11</sup> For judges who have one connection at the time of appointment, the equation will only include the term  $ConnectionLost_{it}^1$  (such event will henceforth be referred as "unique exit"); for judges who have two connections at the time of appointment, the equation will include both  $ConnectionLost_{it}^1$  ("first exit") and  $ConnectionLost_{it}^2$  ("second exit"). Being time-varying, each of these variables starts at 0 and then switches to 1 when the recommending senator leaves office. The underlying hypothesis is that senators in office are particularly relevant for recommending district court judges for appointment to the court of appeals, and that this connection is therefore made obsolete when the senator is no longer in Congress.

$SamePartyPresident_{it}$  is an indicator taking the value 1 if, at year  $t$ , the president of the United States is of the same party as the one who first appointed judge  $i$ , and 0 otherwise.  $x_{it}$  is a vector of judge-specific time-varying controls, which include the uninteracted variable  $SamePartyPresident_{it}$ , and either a full set of dummies for each year of tenure as a district court judge or judge-specific linear trends.

The  $\beta^j$  coefficient captures the effect of losing the connection with recommending senator  $j$  on the promotion probability of judge  $i$ , in years where the president is not of the same party as the one who initially appointed the judge. On the other hand,  $\gamma^j$  measures the differential effect of losing the connection in years in which the president is of the same party, therefore when the judge has a substantially higher probability of being promoted. The terms  $\theta_i$  and  $\tau_{ts}$  are, respectively, judge and state-by-year fixed effects. Finally,  $\varepsilon_{it}$  is the error term, which is clustered at the recommending senator(s) level, corresponding to the level of the identifying source of variation.

Our main focus is on  $\gamma$ . Interpreting such coefficient as causal requires parallel trends: absent the exit from Congress of the recommending senators, the probability of promotion for judges in years in which the president is of the same party and in years in which the president is of a

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<sup>11</sup>In the rare cases in which a senator exits Congress temporarily and then enters it again, we consider the judge connected until the year of definitive exit. Results excluding the judges connected to such senators are almost identical, and are available upon request.

different party would have evolved on parallel paths. In other words, we assume that, conditional on the controls, there is no other variable which is correlated with both the outcome of interest and our main explanatory variables. Under this assumption, we expect the differential effect to be the result of the overlap between having the senator(s) who recommended the first judicial nomination still in office and the president – who is the figure ultimately responsible for any appointment to the courts of appeals – being of the same political affiliation.

Judge fixed effects take account of the fact that judges may be different in several important, time-invariant characteristics, which are likely correlated with both the tenure of their recommending senators and the probability of a promotion (for example, the state of the district court to which they are nominated, or some unobserved component of their ability). State-by-year fixed effects, on the other hand, absorb any potential event affecting all the judges of a given state equally, which may be correlated with both the exit of the recommending senators and the probability of promotion (e.g. the distance from the next Senate race in a given state). Hence, their inclusion ensures that identification is obtained conditional on shocks common to all judges of a given state in each year. Finally, judge's experience fixed effects allow us to non-parametrically account for the time-varying role of experience, which is plausibly correlated positively with both the judge's probability of being promoted and the likelihood that she experiences the exit of a recommending senator. The omission of one of these sets of controls would arguably lead to a bias in the estimates of the coefficients of interest.

One relevant variation of equation (1) relates to timing. To study how judges' promotions evolve in the years just before and after the change in  $ConnectionLost_{it}^j$ , we estimate:

$$\begin{aligned}
 Promotion_{it} = & \theta_i + \tau_{ts} + \sum_{j=1}^2 \sum_{l=-L}^L \beta_l^j \cdot Exit_{i(t+l)}^j \\
 & + \sum_{j=1}^2 \sum_{l=-L}^L \gamma_l^j \cdot (Exit^j \cdot SamePartyPresident)_{i(t+l)} + x_{it}' \theta + \varepsilon_{it}
 \end{aligned} \tag{2}$$

where  $Exit_{it}^j$  takes values 1 if recommending senator  $j$  exits Congress at year  $t$ , and  $l$  flags the years either before or after this event, providing a set of time effects leading up and following the transition period (i.e. the exit).

This allows us both to assess the duration of the effect on the probability of promotion and to

check for the absence of pre-trends.

## 5. RESULTS

**5.1. Effect of Losing the Connection.** Given the potentially different nature of judges who are recommended by one or two senators – possibly reflecting the more or less fragmented political situation of their home states – and the different number of senatorial exits they can experience, we estimate equation (1) separately for these two groups of judges. The results for judges who have one connection at the time of appointment (who can experience at most one "unique exit") are presented in Table 2; those for judges who have two connections at the time of appointment (who can experience both the "first exit" and the "second exit" of their two recommending senators) are shown in Table 3. In both tables, in column (1) we report the estimates from a simplified version of the model, that only includes  $ConnectionLost_{it}^j$  as the main explanatory variable; the rest of the columns report instead the estimates from the full equation.

In Table 2, the coefficient in column (1) indicates that the exit of the unique recommender implies a reduction in the judge's probability of promotion by 0.25 percentage points (approximately a 22% reduction compared to the average probability of promotion in years in which the president is of the same party) – although not statistically significant at any conventional level. Turning to column (2), we can see that this effect is entirely driven by years in which the partisan affiliation of the judge and the president coincide. The  $\gamma^1$  coefficient in column (2) tells us that, in such years, the probability of promotion decreases by 1.04 percentage points more after the recommending senators exits Congress. The coefficient is statistically significant at the 1% level. Moreover, the sum of the coefficients  $\beta^1 + \gamma^1$  – which gauges the marginal effect of losing the connection in years when the president is of the same party as the judge – is also statistically significant (at the 5% level), and implies a decrease in the probability of promotion by 0.79 percentage points (a 68% reduction). Across both columns, we can also notice that the baseline probability of promotion is indeed higher in years with a favorable president.

In Table 3, the results are instead much less clear. Although the  $\gamma^j$ 's coefficients consistently display a negative sign, they are not always statistically significant – such as in column (4). Moreover, the marginal effects ( $\beta^j + \gamma^j$ ) are imprecisely estimated, and we are not able to reject the null hypothesis of no treatment effect for any of them.

There are several possible reasons why the treatment effects differ substantially across the two

groups. First, even if two senators of the president's party are present in a certain state when a judge is appointed, not necessarily both of them take part in the selection process. Therefore, for all such cases, the actual treatment effect would be diluted by the null effect of losing the connection with a senator who is not an actual recommender. By focusing instead on those cases in which only one such senator is in office, the probability of incurring in this type of measurement error is drastically reduced.

Second, judges who can only count on one recommender for their nomination may be more dependent on that senator for the progression of their careers as well, hence magnifying the (negative) effect of losing such connection on the subsequent probability of promotion, compared to those who can rely on two senators instead.

Finally, and related to the previous point, states that have two senators of the same party as the president may also be systematically different from those with only one (e.g., more voters' support for that party, larger share of judges of that political affiliation who can be promoted, etc.). This can make the role of the recommending senator less crucial for the promotion of district court judges, as well as possibly lead the president to appoint as a court of appeals judge someone who is not already sitting on the federal bench.

Altogether, the results from Table 2 and Table 3 provide supportive evidence for the importance of the recommending senator in promoting district court judges to the upper-level courts. In particular, they suggest that such mechanism is prevalent among judges who are recommended by only one senator. For these reasons, such group of judges – i.e., those for which we are able to precisely estimate a treatment effect – will be the focus of the remainder of the paper.

**5.2. Timing of the Effect.** In order to rule out the presence of pre-trends – which would bias our results and undermine the causal interpretation of our estimates – we exploit the precise timing of the senators' exits, and estimate equation (2). Drawing from the conclusions derived from Table 2 and Table 3, we only focus on the sub-sample of judges who have one connection at the time of appointment.<sup>12</sup>

Figure 3 presents the results. On the left panel, we plot the coefficients  $\beta_l^1$  from equation (2), corresponding to the timing of the effect of losing the connection in years when the president is of a different party than the judge; on the right panel, the coefficients  $\gamma_l^1$ , which describe the timing of the differential effect of losing the connection in years when the president is of the same party vs.

<sup>12</sup>Figure A6 presents the results for the group of judges with two connections; as expected, no clear effect emerges.

years when the president is of a different party. The time-window considered is of twelve years, covering the last six years when the senator is in office (corresponding to one senatorial term), and the six years afterwards. Each coefficient corresponds to a year either before or after the exit, and the excluded period is -1, which is the last year in which the senator is in Congress.

In both panels, there is no evidence of pre-trends. Moreover, as expected, the effect is visible only in years with a president of the same political affiliation as the judge. Even though some of the coefficients after the exit are not statistically significant the 5% level (which is not surprising given that promotions are a rare event<sup>13</sup> and the demanding specification we are estimating), it is reassuring to see that all the coefficients in the right panel display a negative sign after the treatment. This suggests that, although the promotion probability may not decrease immediately, it also never returns to the pre-treatment level. This is also consistent with the long time that a judicial nomination takes, from the moment in which the candidate is identified by the recommenders to the date of nomination or start of judicial service, which can amount also to two years.<sup>14</sup>

**5.3. Alternative Explanations and Additional Results.** A possible concern, in light of the results shown above, is whether what matters is really the presence of the recommender in Congress, or if instead any senator from that same party is sufficient. To disentangle the role of the recommending senator from the one of the party, we augment the baseline model interacting our explanatory variables with a dummy variable that indicates whether in year  $t$  and state  $s$  there is any senator of the same party of the judge. The results are illustrated in Figure A1. Unsurprisingly, the probability of promotion decreases more when no senator in state  $s$  is of the same party as the judge (Panel A), and also the marginal effect (Panel B) is larger in magnitude. However, both pairs of coefficients are negative, statistically significant, and not statistically different from each other. This is once again suggestive of the importance for promotions of the recommending senator, whose absence cannot be replace by any senator of the same party.

It is also worth exploring whether the effect is driven by the connection to senators of one party as opposed to another. Figure A2 shows that this is not the case. The coefficient for Democratic and Republican judges are very similar (Panel A), and the marginal effects of losing the connection

<sup>13</sup>In the sub-sample of the 1,056 judges who have one connection at the time of appointment, we observe a promotion for only 122 of them.

<sup>14</sup>It is not uncommon that, if a vacancy arises, the senator in office at the time is the one in charge of finding the candidate to fill the position, and that, by the time the nomination process is finalized, that senator has already left Congress.

are almost identical (Panel B).

In addition, Table A3 suggests that judges of different quality – as proxied by the rating given by the *American Bar Association* – may benefit differently from being connected to their recommender. The coefficients associated to low-qualified judges<sup>15</sup> consistently display a negative sign – suggesting that the probability of promotion after losing the connection decreases more for such judges. However, the coefficients are all imprecisely estimated<sup>16</sup> and none of them is statistically significant. Therefore, we will only cautiously take this as a slightly suggestive evidence of a negative relationship between quality and importance of connection.

Finally, Table A4 shows that there is no statistically significant difference in the treatment effects between judges whose recommending senator exits Congress for an unexpected (e.g., loses the race) vs. an expected (e.g., retirement) reason.

## 6. ROBUSTNESS CHECKS

In this section, we summarize the upshots of three sets of robustness checks. Since the main result presented in Section 5 concerned judges with one recommending senator (see Table 2), we hereby examine the sensitivity of that specific piece of our analysis.

We begin by augmenting Equation (1) with a full set of judge-specific linear trends.<sup>17</sup> This allows us to control for any characteristics of each judge that evolve linearly over time, and that may correlate with both her chances of being promoted and the tenure of her recommender. As displayed in Table A1 in the Appendix, the use of this alternative specification does not significantly affect our results.

A second, important thing to check is that our estimates are not significantly affected by issues associated with two-way fixed effect estimators. In particular, a recent methodological literature has shown how – in difference-in-differences setting with heterogenous treatment timing – two-way fixed effect estimators are a weighted mean of several average treatment effects (ATEs), some of which may receive negative weights (Callaway and Sant’Anna, 2020; Imai and Kim, 2020;

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<sup>15</sup>We consider as low-qualified judges those whose ABA rating is either "Not qualified" or "Qualified", as opposed to "Well qualified" or "Very well qualified".

<sup>16</sup>Variation in ABA ratings is generally small, and the information is available only for some of the judges in our sample (756 out of 1,056 judges who have one connection).

<sup>17</sup>This requires removing from (1) the full set of indicators for a judge’s years of service in the district court, which were included as a way to control non-parametrically for the effects of judicial tenure.

Sun and Abraham, 2020; De Chaisemartin and d’Haultfoeuille, 2020). This, in turn, introduces significant biases and interpretation problems. To address this, using the techniques proposed in De Chaisemartin and d’Haultfoeuille (2020).

First, we use their algorithm to diagnose the extent to which negative weights are actually affecting our baseline estimator for  $\gamma$  in Equation (1). The results of this exercise are very reassuring: of 6,704 ATTs, only 365 (5.8%) receive a negative weight. Also, the treatment effect on the weights does not significantly correlate with the moment at which a judge receives her district court appointment, which is arguably the main dimension along which significant heterogeneities in treatment effects might have been plausible.

Next, to further test the robustness of our results, we re-estimate our event study (Equation (2)) using the  $DID_M$  alternative estimator put forward by De Chaisemartin and d’Haultfoeuille (2020). As shown in Figure A3, although somewhat less precisely estimated, the dynamics of our effect of interest closely track those documented by Panel B of Figure 3. In other words, there is no significant evidence that our main result is driven by the choice of a specific estimator.

Finally, we exclude subsets of observations to verify how each of them impacts our estimates. Namely, we first repeat our baseline regression several times, each time excluding judges in the district courts of a given State across all years. We then repeat the same process, but each time removing observations referred to one of the forty-three presidential spells covered by our sample. The upshots of these exercises are illustrated in the Appendix, Figure A4. As shown by Panel A, our estimate of  $\gamma$  from Equation (1) is very stable to the exclusion of federal judges from different states. On the other hand, when it comes to excluding periods referred to different administrations, Panel B of Figure A4 reveals that excluding observations referred to Ronald Reagan’s spell in the White House (1981-1989) significantly reduces the magnitude of our coefficient of interest. This is consistent with President Reagan’s exceptional activism in promoting district court judges: of the 310 promotions in our sample, 33 (10.6 %) took place under his presidency, more than any other president in the history of the United States.

## 7. CONCLUSION

In this paper, we have provided evidence that US senators can have a large influence in shaping the careers of US federal judges, even beyond the initial appointment stage. In particular, exploiting the exit of senators from Congress as a source of within-judge variation in connectedness, we have

shown that losing the tie to their recommending senator reduces the probability of promotion of district court judges by 68%, on average. Consistent with the institutionalized patronage mechanism in place for many federal appointments, such an effect emerges in years in which judges share partisan affiliation with the sitting president, and would thus stand to gain from their personal connection with a senator.

These findings carry important implications for our understanding of the career trajectories of this important category of civil servants, who have a vital role in the day-to-day functioning of one of the three branches of the US government apparatus. While scholarship has tended to focus on party affiliation and has mostly looked at its impact on sentencing behavior, we have documented how personal connections to specific politicians can affect the chances of judges to access top-level positions within the Federal Court System. On top of helping to explain who gets to become a top-level judge, these patterns may arguably be a significant determinant of judges' performance.

In fact, after losing the connection to their recommender, judges find themselves in a life-lasting appointment with minimal chances for further career advancement. As shown by several studies in political economy and industrial organization (see, e.g. Bertrand et al., 2020; Ke et al., 2018), this combination may drastically reduce the incentives to provide effort on the job, thus lowering the efficiency of the Federal Court System as a whole. Given that an independent, fair, and functioning judiciary is a pillar of successful democratic systems (Gibler and Randazzo, 2011), inquiring whether and how individual patronage relationships may affect judicial performance is a fascinating and urgent question.

In ongoing work, we are analyzing several productivity and performance measures. The main sources are proprietary data from TRAC (Transactional Records Access Clearinghouse), that allow us to match the identity of the judge to the publicly available records of criminal sentences; and, judicial opinions, as a measure of both quantity and quality of judges' output, from CourtListener and BloombergLaw.



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## TABLES

Table 1: Summary Statistics - Regression Sample

	Mean	Stand. Dev.	Min	Max
<i>Panel A. Cross-Sectional Variables</i>				
Ever Promoted	0.106	0.308	0	1
Connections at Appointment	1.510	0.500	1	2
Connections at Promotion	1.467	0.500	1	2
Total Tenure	19.82	12.22	1	56
Tenure at Promotion	9.843	5.932	1	28
<i>Party of Appointment</i>				
Democratic	0.484	0.500	0	1
Republican	0.490	0.500	0	1
Federalist	0.012	0.107	0	1
Jeffers. Republican	0.011	0.103	0	1
Whig	0.003	0.057	0	1
	Mean	Stand. Dev.	Min	Max
<i>Panel B. Time-Varying Variables</i>				
Promoted at Year $t$ (x 100)	0.536	7.302	0	100
Same-Party President	0.530	0.499	0	1
Lost Connection (Unique)	0.631	0.483	0	1
Lost Connection (First)	0.710	0.454	0	1
Lost Connection (Second)	0.407	0.491	0	1
Tenure at Year $t$	14.18	10.20	1	56

*Notes:* Panel A only includes judges nominated to district court for a state in which there was at least one senator from the same party as the president at the time of nomination. In Panel B, statistics are computed for the 42,715 judge-year observations part of our sample, as described in Section 3.3.

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Table 2: Connections and Promotions - Unique Exit

	(1)	(2)
<i>ConnectionLost</i>	-0.25 (0.24)	0.25 (0.24)
<i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-1.04*** (0.30)
<i>Same-Party President</i>	0.77*** (0.12)	1.48*** (0.29)
<i>ConnectionLost</i> + <i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-0.79** (0.31)
<u>Mean Probability of Promotion</u>		
<i>(ConnectionLost = 0)</i>		
<i>Same-Party President = 0</i>	0.16	0.16
<i>Same-Party President = 1</i>	1.16	1.16
Observations	20,395	20,395
Judge FEs	Y	Y
State $\times$ Year FEs	Y	Y
Judge's Experience FEs	Y	Y

*Notes:* In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had one connection at the time of appointment. Standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

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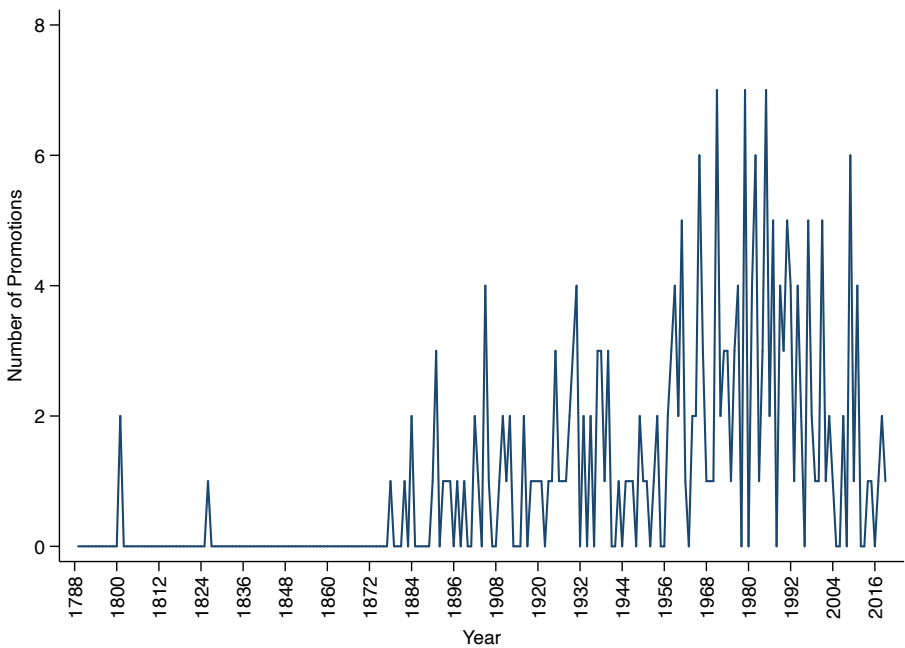
Table 3: Connections and Promotions - First and Second Exit

	(1)	(2)	(3)	(4)
<i>ConnectionLost (First)</i>	-0.33 (0.31)	0.17 (0.30)	-0.28 (0.31)	0.13 (0.30)
<i>ConnectionLost (Second)</i>	0.64* (0.35)	0.63* (0.34)	0.88*** (0.30)	0.78*** (0.30)
<i>ConnectionLost (First) × Same-Party Pres.</i>		-0.76** (0.39)		-0.65 (0.43)
<i>ConnectionLost (Second) × Same-Party Pres.</i>			-0.45* (0.26)	-0.28 (0.29)
<i>Same-Party President</i>	0.52*** (0.18)	1.15*** (0.38)	0.81*** (0.24)	1.24*** (0.38)
<i>ConnectionLost (First) + ConnectionLost (First) × Same-Party Pres.</i>		-0.59 (0.39)		-0.52 (0.42)
<i>ConnectionLost (Second) + ConnectionLost (Second) × Same-Party Pres.</i>			0.43 (0.41)	0.50 (0.42)
<u>Mean Probability of Promotion</u>				
<i>(ConnectionLost (First) = 0)</i>				
<i>Same-Party President = 0</i>	0.06	0.06	0.06	0.06
<i>Same-Party President = 1</i>	0.80	0.80	0.80	0.80
Observations	17,659	17,659	17,659	17,659
Judge FEs	Y	Y	Y	Y
State × Year FEs	Y	Y	Y	Y
Judge's Experience FEs	Y	Y	Y	Y

*Notes:* In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had two connections at the time of appointment. Standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

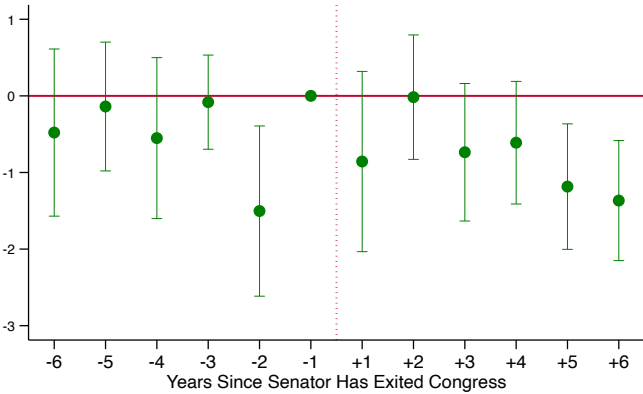
FIGURES

Figure 1: Promotions of District Court Judges in the Period 1789-2019



*Notes:* The figure reports the number of federal district court judges, who are part of our sample as described in Section 3.3 and got promoted to an appellate court, in every year from 1789 to 2019.

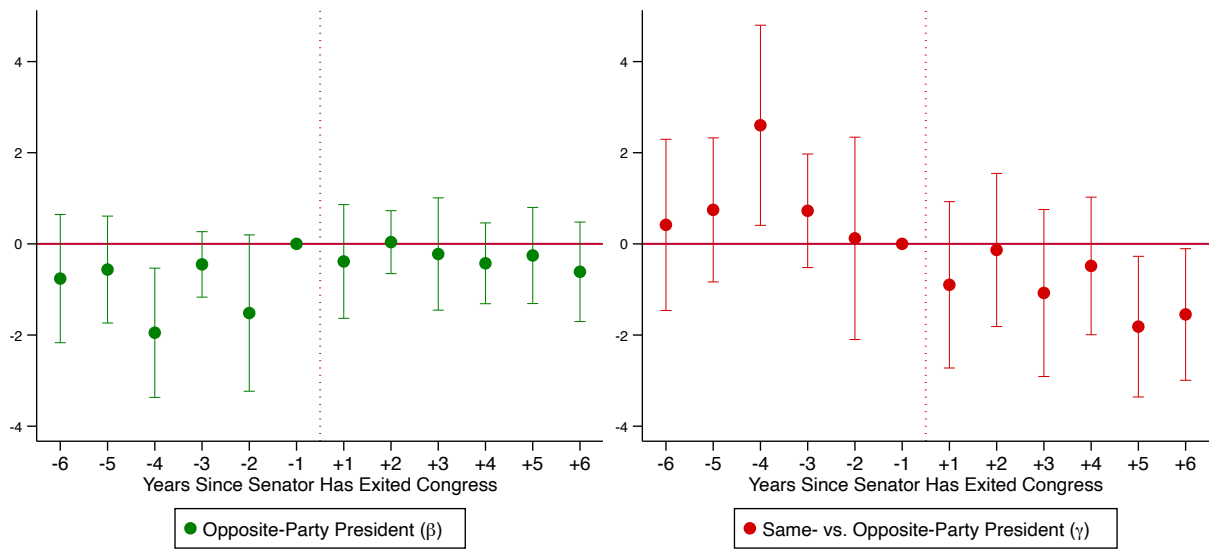
Figure 2: Timing of the Effect - Unique Exit



*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level. Regressions include the following sets of FEs: judge, circuit court by year, and judge's experience. This sample includes only district court judges who had one connection at the time of appointment.



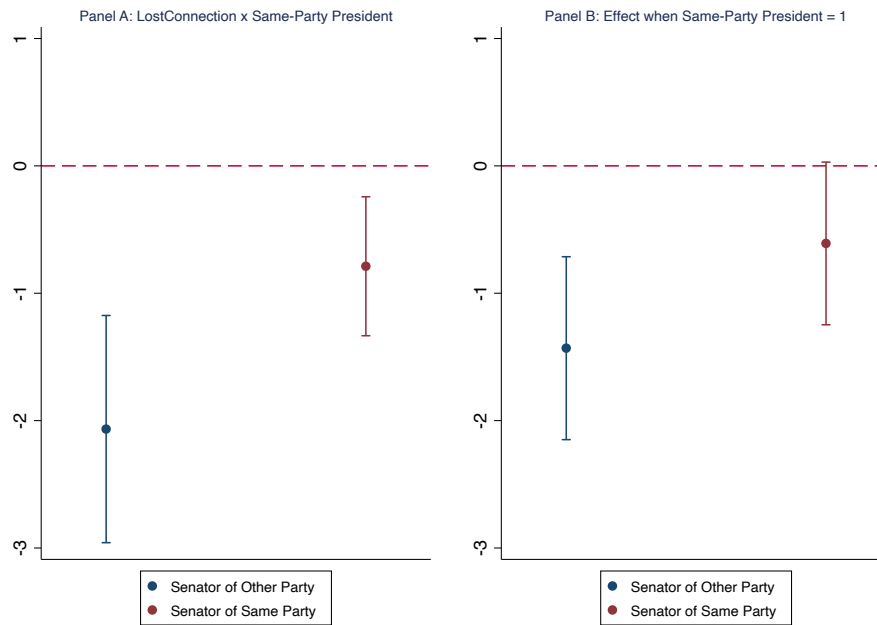
Figure 3: Timing of the Effect and Party of the President - Unique Exit



*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level. Regressions include the following sets of FEs: judge, circuit court by year, and judge's experience. This sample includes only district court judges who had one connection at the time of appointment.

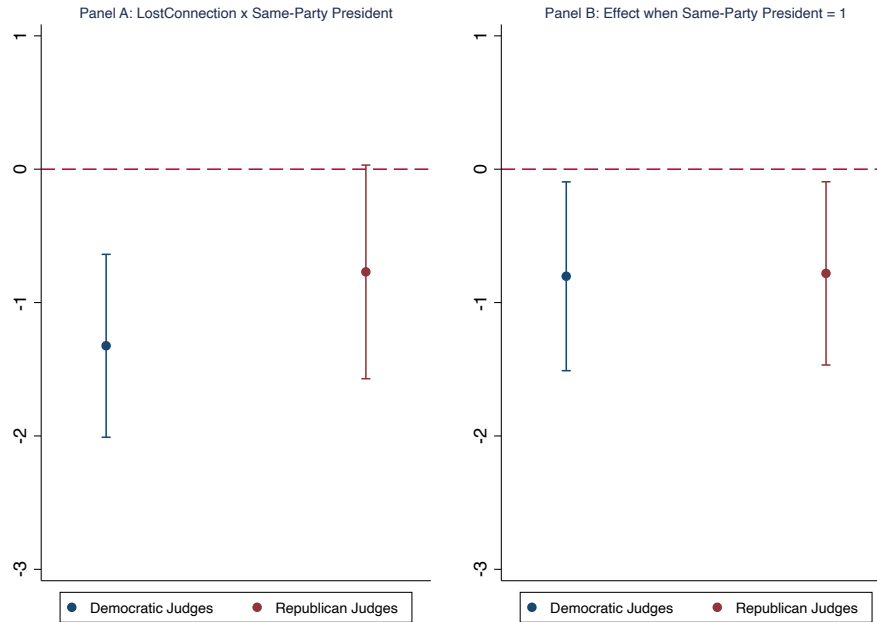
## APPENDIX

Figure A1: Recommender vs. Party Connection - Unique Exit



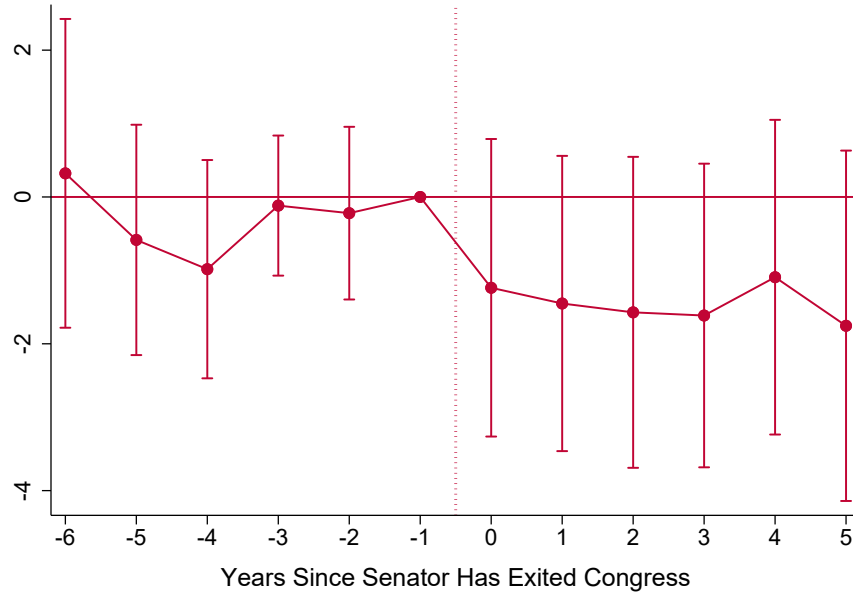
*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending-senator level. Regressions include the following sets of FEs: judge, state by year, and judge's experience. This sample includes only district court judges who had one connection at the time of appointment.

Figure A2: Heterogeneity by Party Affiliation - Unique Exit



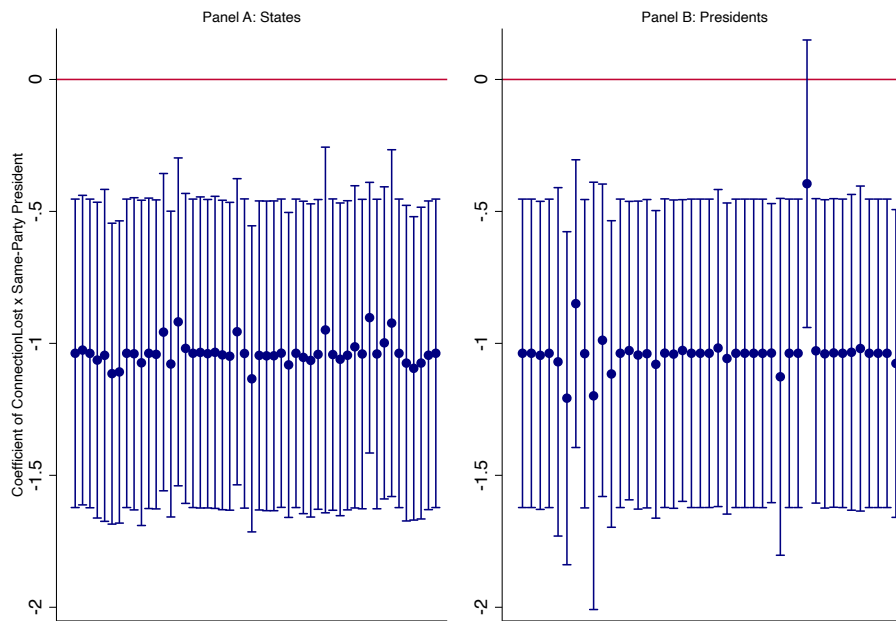
*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending-senator level. Regressions include the following sets of FEs: judge, state by year, and judge's experience. This sample includes only district court judges who had one connection at the time of appointment.

Figure A3: Robustness Checks - Alternative Event Study Using the Methodology for Heterogeneous Treatment Effects Proposed in De Chaisemartin and D'Haultfoeuille (2020)



*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Point estimates for the effect of having lost the connection to the recommending senator in years when the president is of the same party as the one who nominated the judge ( $\gamma$  in Equation (1)), retrieved via the  $DID_M$  estimator of De Chaisemartin and d'Haultfoeuille (2020). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level. Regressions include the following sets of FEs: judge, year, and judge's experience. This sample includes only district court judges who had one connection at the time of appointment.

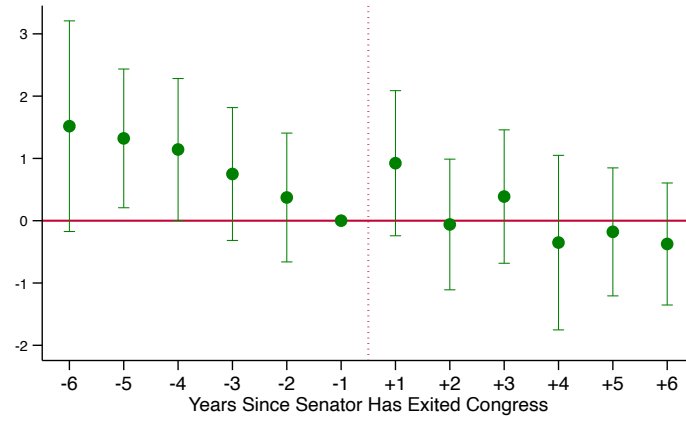
Figure A4: Robustness Checks: Excluding States and Presidents - Unique Exit



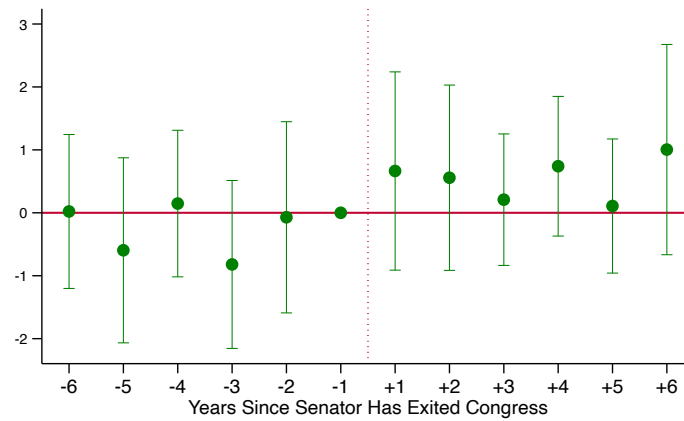
*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Point estimates are the marginal effect of losing the connection with the recommending senator when the president is of the same party as the one who initially nominated the judges (the parameter  $\beta + \gamma$  in Equation (1)). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level.

Figure A5: Timing of the Effect - First and Second Exit

Panel A: First Exit



Panel B: Second Exit

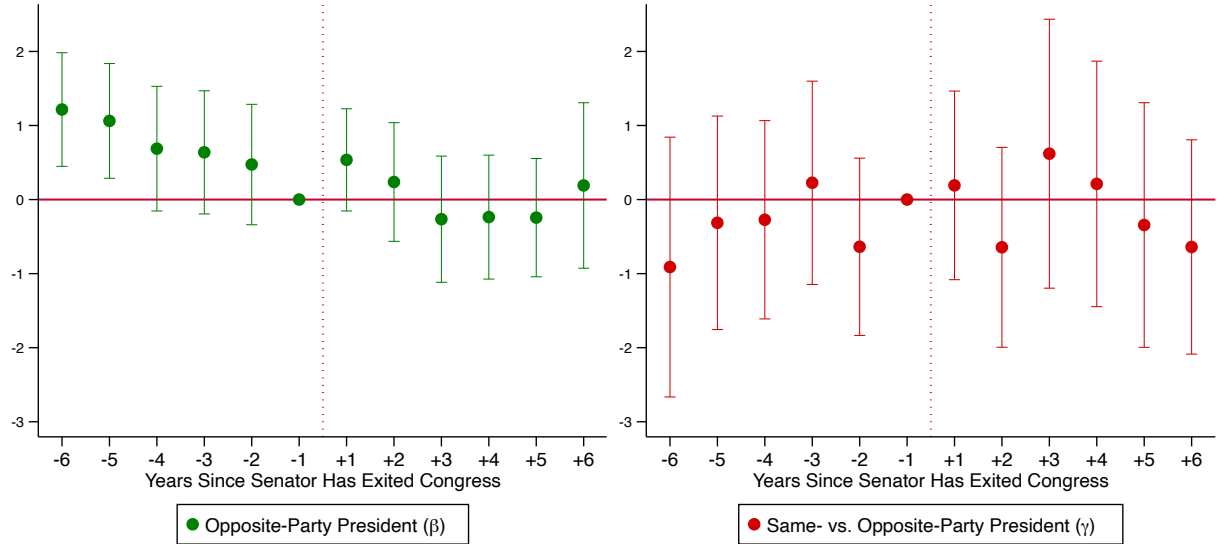


*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level. Regressions include the following sets of FEs: judge, circuit court by year, and judge's experience. This sample includes only district court judges who had two connections at the time of appointment.

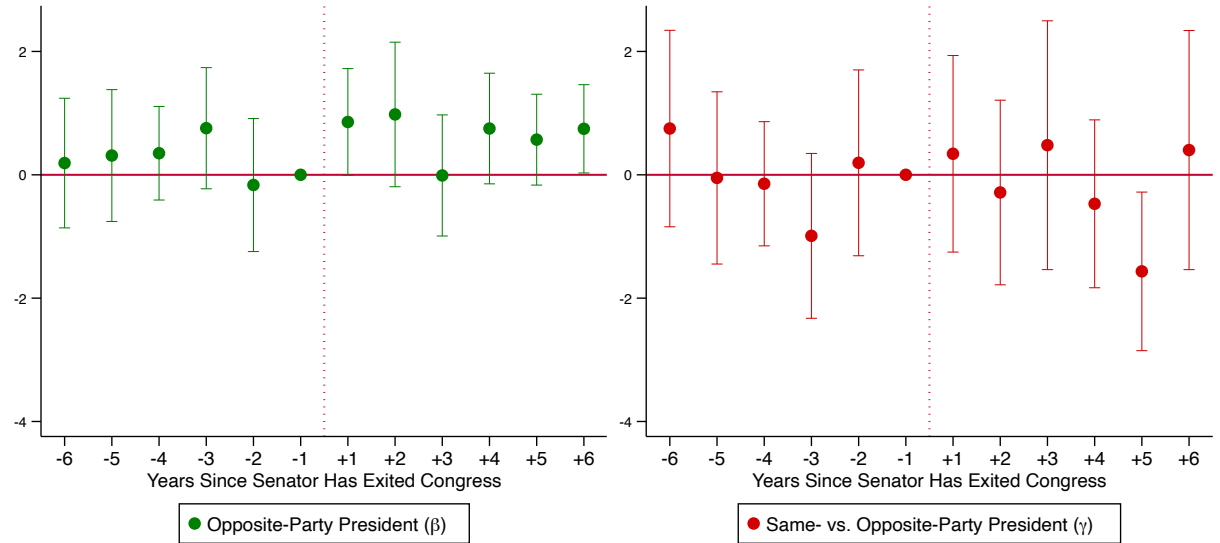
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Figure A6: Timing of the Effect and Party of the President - First and Second Exit

Panel A: First Exit



Panel B: Second Exit



*Notes:* The dependent variable is an indicator for district judge  $i$  being promoted at year  $t$  (multiplied by 100). Vertical lines are 95% confidence intervals based on robust standard errors clustered at the recommending senator level. Regressions include the following sets of FEs: judge, circuit court by year, and judge's experience. This sample includes only district court judges who had two connections at the time of appointment.

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Table A1: Promotions - Unique Exit  
Judge-Specific Linear Trends

	(1)	(2)
<i>ConnectionLost</i>	-0.23 (0.26)	0.20 (0.33)
<i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-0.86*** (0.29)
<i>Same-Party President</i>	0.66*** (0.11)	1.26*** (0.26)
<i>ConnectionLost</i> + <i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-0.66*** (0.23)
<u>Mean Probability of Promotion</u>		
<i>(ConnectionLost = 0)</i>		
<i>Same-Party President = 0</i>	0.16	0.16
<i>Same-Party President = 1</i>	1.17	1.17
Observations	20,398	20,398
Judge FEs	Y	Y
State $\times$ Year FEs	Y	Y
Judge Linear Trends	Y	Y

*Notes:* In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had one connection at the time of appointment. Standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



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Table A2: Connections and Promotions - Heterogeneity by Partisanship  
Unique Exit

	(1)	(2)	(3)
<i>ConnectionLost</i>	-0.12 (0.27)	0.36 (0.28)	0.52* (0.28)
<i>ConnectionLost</i> × <i>Same-Party President</i>		-1.03*** (0.30)	-1.32*** (0.35)
<i>ConnectionLost</i> × <i>Republican</i>	-0.24 (0.23)	-0.21 (0.21)	-0.53* (0.31)
<i>ConnectionLost</i> × <i>Republican</i> × <i>Same-Party President</i>			0.55 (0.48)
<i>Republican</i> × <i>Same-Party President</i>			0.26 (0.55)
<i>Same-Party President</i>	0.77*** (0.12)	1.48*** (0.29)	1.36*** (0.32)
<i>ConnectionLost(Republican)</i> + <i>ConnectionLost(Republican)</i> × <i>Same-Party Pres.</i>			0.02 (0.33)
<u>Mean Probability of Promotion</u>			
<i>(ConnectionLost = 0)</i>			
<i>Same-Party President = 0</i>	0.16	0.16	0.16
<i>Same-Party President = 1</i>	1.16	1.16	1.16
Observations	20,395	20,395	20,395
Judge FEs	Y	Y	Y
State × Year FEs	Y	Y	Y
Judge's Experience FEs	Y	Y	Y

Notes: In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had one connection at the time of appointment. Standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

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Table A3: Connections and Promotions - Heterogeneity by Rating  
Unique Exit

	(1)	(2)	(3)
<i>ConnectionLost</i>	0.09 (0.27)	0.67** (0.27)	0.47* (0.28)
<i>ConnectionLost</i> $\times$ <i>Low ABA</i>	-0.42 (0.28)	-0.44 (0.29)	-0.04 (0.30)
<i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-1.24*** (0.31)	-0.90** (0.35)
<i>ConnectionLost</i> $\times$ <i>Low ABA</i> $\times$ <i>Same-Party President</i>			-0.71 (0.48)
<i>Low ABA</i> $\times$ <i>Same-Party President</i>			0.59 (0.40)
<i>Same-Party President</i>	0.77*** (0.13)	1.59*** (0.30)	1.31*** (0.29)
<i>ConnectionLost</i> ( <i>Low ABA</i> ) + <i>ConnectionLost</i> ( <i>Low ABA</i> ) $\times$ <i>Same-Party Pres.</i>			-0.75* (0.42)
<u>Mean Probability of Promotion</u>			
<i>(ConnectionLost = 0)</i>			
<i>Same-Party President = 0</i>	0.19	0.19	0.19
<i>Same-Party President = 1</i>	1.09	1.09	1.09
Observations	15,457	15,457	15,457
Judge FEs	Y	Y	Y
State $\times$ Year FEs	Y	Y	Y
Judge's Experience FEs	Y	Y	Y

*Notes:* In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had one connection at the time of appointment. Robust standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

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Table A4: Connections and Promotions - Heterogeneity by Type of Exit  
Unique Exit

	(1)	(2)	(3)
<i>ConnectionLost</i>	-0.12 (0.26)	0.35 (0.25)	0.41 (0.27)
<i>ConnectionLost</i> $\times$ <i>Same-Party President</i>		-1.03*** (0.30)	-1.13*** (0.36)
<i>ConnectionLost</i> $\times$ <i>Unexpected</i>	-0.23 (0.26)	-0.18 (0.25)	-0.31 (0.37)
<i>ConnectionLost</i> $\times$ <i>Unexpected</i> $\times$ <i>Same-Party President</i>			0.19 (0.51)
<i>Unexpected</i> $\times$ <i>Same-Party President</i>			-0.35 (0.49)
<i>Same-Party President</i>	0.77*** (0.13)	1.59*** (0.31)	1.31*** (0.30)
<i>ConnectionLost(Unexpected)</i> + <i>ConnectionLost(Unexpected)</i> $\times$ <i>Same-Party Pres.</i>			-0.35 (0.49)
<u>Mean Probability of Promotion</u>			
<i>(ConnectionLost = 0)</i>			
<i>Same-Party President = 0</i>	0.16	0.16	0.16
<i>Same-Party President = 1</i>	1.16	1.16	1.16
Observations	20,395	20,395	20,395
Judge FEs	Y	Y	Y
State $\times$ Year FEs	Y	Y	Y
Judge's Experience FEs	Y	Y	Y

Notes: In all models, the dependent variable is an indicator for district judge  $i$  being promoted at year  $t$ . Coefficients, standard errors and baseline means are multiplied by 100 to enhance readability. This sample includes only district court judges who had one connection at the time of appointment. Standard errors clustered by recommending senator(s) in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .