Musical Chairs: The Causes and Effects of Politicized and Frequent Judge Transfers in India*

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Comments welcome!

Abstract

In many parts of the world, judges are transferred frequently and based on political considerations. Judge transfers reduce court productivity and impede the speedy resolution of court cases. We test these propositions using big data from the courts of first instance in Uttar Pradesh, India's largest state, and credible research designs. The data confirm that judge transfers are indeed frequent and politicized: they occur approximately once every 10 months, both due to and to limit political interference. Transfers reduce court productivity, and make it less likely that cases are decided in a time-bound manner. These outcomes obtain because transfers cause temporary judge vacancies, and since portions of cases that experience judge transfers need to be reheard. This paper documents a major, unappreciated cause of judicial delays and demonstrates how seemingly mundane judge staffing decisions are politicized and can have major welfare implications.

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In large parts of the world, particularly in the Global South, court cases take years—sometimes decades—to conclude, leading to severe court congestion. Case delays are normatively problematic and undermine the rule of law, human rights, and economic development (Voigt 2016). In this paper, we argue and show that a major, overlooked cause of case delays and court congestion is the politicized, frequent transfer or reassignment of judges across positions. This underappreciated problem is relatively common across the world, affecting countries as diverse as China (Zhu 2024), France (Cohen 2018), Kenya (Orina 2016), Mexico (Pozas-Loyo and Ríos-Figueroa 2018), Italy (Guerra and Tagliapietra 2017) and, as we show, India.

We study the political economy of judge transfers and their costs. Under conditions of excess, arguably "perverse" accountability, we theorize that judges are likely to be transferred frequently at the behest of politicians despite rules to the contrary. We argue that frequent transfers are likely to worsen court productivity and lead to case delays because transfers increase the odds of a case being temporarily unassigned to a judge and as new judges take additional hearings to decide cases.

We investigate these issues in the context of India's "lower judiciary," which serves as courts of first instance for 1.4 billion people. India is a particularly useful case to study because its judicial system, modeled on Britain's and based in common law, is akin to many systems across the developing world. Alarmingly, India's judiciary suffers from an increasing backlog of over 51 million cases. This is even though Indians file among the *fewest* cases per person per year, considerably fewer than people in the United States, United Kingdom, Korea, Japan, and Malaysia (Galanter 2009). What accounts for these patterns, and how can the country's judicial staffing patterns be changed to increase access to justice?

To test our theory, we leverage new "big data" on India's judges and millions of court cases, paired with research designs that enable causal inference. We find that India's judges are transferred or moved from one courtroom to the next very frequently. In Uttar Pradesh, India's largest state, judges are transferred once every 10 months. We argue and show that transfers are politicized. Judge transfers reduce court productivity, with the average transfer causing over 45 fewer court

decisions (equivalent to 1.2 months of decisions) to be issued in the three months before and after transfers. Consistent with this pattern, judge transfers decrease the chances that court cases are decided quickly, with one additional judge transfer decreasing the chances that a case was decided at end-2021 by 6.5%. Transfers have these effects by causing judge vacancies and by causing portions of cases to be reheard. Unanticipated, "off-cycle" transfers particularly impede case resolution, whereas bail cases—which have to be resolved quickly—are less likely to be slowed by transfers.

Our study contributes to three broad literatures in the social sciences. The first, which straddles the social sciences, examines court efficiency and largely focuses on developed countries. This literature typically examines the effects of seemingly apolitical factors—such as the number of courtrooms, judges, incentives, technology, and case complexity—on judicial decision-making (Ramseyer 2012; Voigt 2016). We take this literature in a new direction by arguing that seemingly innocuous, but as we show deeply politicized, judge staffing decisions can shape judge productivity too.¹

A second literature this project contributes to is on the political economy of the bureaucracy in the global South. The literature on state capacity, which examines the conditions under which states invest in the bureaucracy, largely focuses on the effects of exogenous factors such as wars (Tilly 1990; Dincecco et al. 2022) and geography (Herbst 2000) on state-making. Newer works examine the effects of more endogenous factors such as the extension of the franchise (Suryanarayan and White 2021), bureaucratic embeddedness (Bhavnani and Lee 2018; Xu et al. 2023), identity and affirmative action (Bhavnani and Lee 2021; Ding et al. 2021), and politician-bureaucrat interactions (Bhavnani et al. 2024; Purohit 2024) on bureaucratic performance. We further this literature by examining the political economy of *judge* transfers, thereby extending the study of the bureaucracy to an understudied arm of the state: the judiciary.

As we show below, a major contribution of this project is to bring the two literatures above—on judicial efficiency on the one hand, and bureaucracy on the other—into conversation with one

¹ In related work in economics, Grajzl and Silwal (2020) study the effect of "multi-court" judging in Nepal.

another. By doing so, we can examine the effects of the politically influenced judicial bureaucracy on decision-making in India. The broad hypothesis is that politicians influence judicial outcomes via their influence over judicial staffing.

A third, smaller literature that this project deepens is the political science and economics work on the Indian judicial system (see Muralidharan 2024 for a recent synthesis). These works have largely focused on the developmental effects of judicial delays (Chemin 2009, 2012; Rao 2024), arguing that these undermine relational contracting and access to credit. A smaller strand has focused on the important issue of judicial bias (Ash et al. 2023; Jassal 2024) and the effects of religiosity and religious riots (Bharti and Roy 2023; Mehmood et al. 2023), temperature (Craigie et al. 2023), the media (Vasishth 2022), and legal aid (Bharti and Lehne 2024) on judicial decision-making. One paper has focused on the question of judicial independence (of the upper judiciary; see Aney et al. 2021), and no works I know of examine the issue of judicial efficiency. The latter is a pressing concern as the country's lower judiciary has extraordinarily high pendency despite having few case filings relative to the population.

1 Theoretical Framework

To theorize about the causes and consequences of frequent judicial transfers, we start by defining judge transfers as any staffing decision—such as due to judge reassignments and retirements—that results in changes in the assignment of judges to courtrooms. In most contexts, senior judges and/or politicians are responsible for judge transfers (Malleson and Russell 2006). Judge transfers are usually subject to formal and informal rules, designed to insulate judges from political pressure while ensuring the efficient and equitable development and allocation of talent. Many bureaucracies follow two dictates in this regard. The first is that individuals, in this case judges, cannot be assigned to the regions they are from, to prevent nepotism. And the second is that judges are transferred periodically to develop their skills, reduce corruption, and increase judicial independence. Indeed, these are the standard rationales for transfers outlined in bureaucratic manuals and studies of public

administration (Iyer and Mani 2012; Northcote and Trevelyan 1854). The idea is that a lack of corruption and impartiality are ensured when state functionaries do not serve in the place of origin or that they have close ties to, and that frequent transfers ensure that these ties are largely absent.

We argue that decision-makers are likely to seek the frequent transfer of judges beyond what the rules allow under conditions of "perverse accountability." Under these conditions, rent-seeking politicians will seek to transfer judges frequently to influence them. As Agnihotri et al. (2024), Brierley (2020) and Wade (1982) have shown in Ghana and India, politicians can leverage bureaucrats' preferences over job locations (with most preferring to be near their places of origin and/or in urban areas) to influence them. That is, judges are asked to do politicians' bidding under threat of transfer to undesirable locations and/or positions. Despite the *de jure* insulation of judges from politicians and their demands, similar dynamics might obtain with regard to judges. Their postings, too, might be influenced by politicians. This discussion suggests the following hypothesis: H_1 : Judges are transferred frequently

Although all politicians will have some ability and incentive to increase judge transfers, we argue that two subsets of politicians will be particularly likely to influence judge transfers. First, politicians from the ruling party (that is, the party with a legislative majority) are likely to be able to influence judge transfers via pressuring the senior judges responsible for judge transfers directly, or indirectly via their influence over the executive. Either way, politicians from the legislative majority rather than the minority are more likely to have such influence. This suggests the following hypothesis:

 H_2 : Politicians from the ruling party transfer judges in their districts

Second, politicians charged with crimes might be particularly keen on transferring judges to obtain favorable judicial outcomes for their cronies or themselves. Politicians might seek the transfer of judges who are assigned to hear their cases, to delay decision-making and/or ensure

favorable judicial outcomes. Alternatively, if politicians charged with crimes increase criminality more generally because of demonstration effects or because they run criminal enterprises, they might seek the transfer of judges in their districts, whether they are assigned to hear their specific

cases or not. This suggests the following hypotheses:

 H_3 : Politicians charged with crimes transfer judges in their districts

 H_4 : Politicians charged with crimes transfer judges in their districts who are hearing cases against them

We next turn to theorizing about the efficiency costs of judicial transfers, although transfers are likely to have some benefits too. We consider the effects of judge transfers at the courtroom and case levels.

When judges are transferred out of a courtroom, the case load that they are currently hearing remains in the original courtroom. The original courtroom may remain vacant for a while and will then be assigned a new judge. Frequent transfers are more likely to cause judge vacancies since not all transfers out of or away from a position will be met with simultaneous transfers into that position. This pattern of transfers causing vacancies has been noticed in Italy (Guerra and Tagliapietra 2017). A vacant court, of course, cannot issue decisions and transfers therefore make it less likely that a case will be decided.

As judges approach their transfers, they may experience reduced morale and lower motivation. This, too, might reduce court activity, including the hearings judges conduct and the decisions they issue. New judges will take time to adjust to their new caseload and staff (see also Grajzl and Silwal 2020), slowing proceedings in the courtroom for some time after the transfer. Indeed, for existing cases, judge transfers might cause portions of cases to be reheard. This suggests the following hypotheses:

 H_5 : Courtrooms are less productive in the run up to and after transfers

 H_6 : Courtrooms that experience transfers are more likely to be vacant

 H_7 : Courtrooms that experience transfers have fewer hearings

At the case level, this yields the following hypotheses:

 H_8 : Cases that experience transfers are less likely to be decided

 H_9 : Cases that experience transfers are more likely to be unassigned to a judge

 H_{10} : Cases that experience transfers have more hearings

Transfers come in two types: "on-cycle" transfers, which occur at standard times of the year and can therefore be planned for, and "off-cycle" transfers, which occur throughout the year and are less predictable. Of the two, the latter is more likely to be disruptive since they cannot be planned for.

Having outlined our theoretical expectations about the causes and negative consequences of judicial transfers, we highlight why India is a good case to study and note some of its relevant characteristics.

2 India's Lower Judiciary: Massive Judicial Delays Despite Few Case Filings

India's legal system is based on common law and was inherited mainly from the British. In this respect, it is similar to the legal systems of over 40 other common law countries and many more countries with mixed legal systems (Kritzer 2002), several of which also suffer from judicial delays (Dakolias 2014). The Indian judicial system is also relatively open, in that rich data on its courts are posted online. As such, studying the Indian judicial system is possible, and insights from such studies could apply to other developing countries with common law systems and judicial delays.

The Indian judiciary is made up of the upper (the Supreme Court of India and the country's 25 High Courts—these are constitutional courts) and the lower judiciary (there are over 14,000 of these courts of first instance). Case pendency is high across the judiciary and is among the worst in the world. The lower courts—the focus of our study—count for most pending cases. Despite being a federal country, India's judicial system is unitary in that it applies and interprets the country's federal and state laws to the cases before it.

India's judiciary is staffed by professional judges who are (with some exceptions) generalists,

that is, they largely do not specialize in adjudicating specific matters (except for most but not all tax matters, which separate revenue courts handle). Therefore, judges of the same level of seniority can be transferred at will because their skill sets are comparable. In the lower judiciary, judges sit singly (rather than in benches with multiple judges) to decide cases.

The country's lower courts are created by state governments, and they are staffed by judges recruited directly from law schools or the State Bar Associations by using meritocratic selection procedures, including exams and interviews. The lower judiciary has a lot of judge vacancies, with approximately 25% or 5,000 positions vacant. Once recruited, judge promotions and transfers across and within India's administrative districts occur at the behest of "collegiums" of up to three of the senior-most judges in the state High Courts (the equivalent of US Circuit Courts), with inputs from the senior most judges in each district. Although state and national level politicians have no de jure role in this process, a political economy approach suggests that there are unofficial channels of influence.

The timing and destination of judge transfers are supposed to occur based on staffing needs, subject to rules and norms designed to ensure the even development and application of talent across space and a lack of corruption. To these ends, judges are not allowed to work in their home districts, and cross-district judge transfers are mandated every three years. That said, midterm transfers across districts are common (while judges spend an average of 2.3 years in districts, the standard deviation is 2 years), and transfers across courtrooms within a court or district are even more frequent than cross-district transfers (62% of transfers are within districts). Perhaps unintentionally, these patterns turn judges into "outsiders" who have difficulty understanding local conditions and have a limited sense of "commitment to a particular caseload" (Moog 1994, 23-24). In this paper, we examine the downstream consequences of frequent, and as we show, politicized, judge transfers. To be clear, by judge transfers at the case level, we mean any action—judge reassignments, including due to retirements—that changes the judge to whom all cases in a courtroom are assigned. In our data, 3% of transfers are due to retirements, 12% are collateral transfers caused on account of retirements, while the vast majority are due to judge reassignments across or within districts.

3 Research Designs and Big Data

We have theorized that judges in India are often transferred at the behest of politicians. These effects are likely to affect transfers across the board, that is, they are likely to increase the overall level of transfers across India. This effect is hard to confirm because we do not observe the counterfactual, that is, an India or Uttar Pradesh without politicization. That said, politicians from the legislative majority are more likely to cause transfers since they are powerful. Furthermore, politicians charged with crimes are also more likely to demand transfers because they are more likely to benefit from a weaker judiciary. On the other hand, if judge transfers are not politicized, transfers should be orthogonal to politician characteristics. To test for this, we use an augmented difference-in-difference strategy applied to panel data on judge transfers across courtrooms between 2012–2021. We estimate the following equation:

$$Transfers_{ct} = \alpha X_p + \beta_c + \gamma_t + \delta_i + \zeta_z + \epsilon_{ct}$$
 (1)

This models transfers observed in courtroom c in month-year t as a function of politician characteristics (X_p) , constituency (β_c) and month-year fixed effects (γ_t) . We augment this standard difference-in-difference setup with judge (δ_j) and court type (ζ_z) fixed effects. This strategy allows us to parse politician from judge effects, since judges serve in areas governed by different politicians. The null hypothesis—that judge transfers are not politicized—suggests that the estimated effects of politician characteristics (α) should be null. To be clear, α is not an estimate of the politicization of transfers, but for the additional or marginal politicization of transfers due to politician attributes rather than due to political dynamics more generally.

To examine the degree to which judge transfers slow decision-making, we conduct analyses at the courtroom and case levels. At the courtroom level, we rely on a panel dataset of 2,485 courtrooms observed monthly between 2010 and 2018, and estimate the following two-way fixed

effects model.

$$Y_{ct} = \alpha + \beta Transfers_{ct} + \gamma X_{ir} + \delta_c + \zeta_t + \eta_t + \epsilon_{ir}$$
 (2)

This equation models the outcomes (number of decisions, hearings and court vacancies) for a courtroom c in a month t as a function of transfers and constituency and month-year fixed effects. We improve upon this standard difference-in-difference set up by controlling for court type and judge fixed effects too, thereby examining how the same judges experience different levels of transfers as politicians change.

For our case-level analysis, we turn to our dataset of the over 8 million cases filed in Uttar Pradesh between 2010–2018, and estimate the following equation using fixed effects linear probability model.

$$Y_{ir} = \alpha + \beta Transfers_{ir} + \gamma X_{ir} + \delta_c * \zeta_r + \eta_t + \epsilon_{ir}$$
(3)

This equation relates our outcome variables (an indicator for whether a case *i* in courtroom *r* is decided by end-2021 and the number of hearings)—to the number of transfers ($Transfers_{ir}$) experienced by the case, controlling for the number of sections of the law a case is filed under (X; this measures case complexity), filing month-year fixed effects (η_t), and case type (δ_c) and courtroom (ζ_r)² fixed effects and their interactions.

We code a courtroom as experiencing a judge transfer due to judge reassignments to other courtrooms, which might or might not occur due to judge retirements. When court cases are filed, the court administration or registrar assigns them to the first available courtroom, where they typically stay until decided. A court case is therefore coded as experiencing a judge transfer when a judge assigned to a courtroom is moved out.

Although our selection on observables strategy for the courtroom and case-level analyses controls for a wide range of fixed effects, unobserved confounding could still theoretically bias the estimated effects of transfers. To better isolate the causal effect of judge transfers, for both analyses,

² Once filed, court registrars assign cases to courtrooms in an arbitrary manner.

we focus on transfers due to retirements. India has a mandatory judge retirement age of 60, and judges do in fact retire at precisely this age. This renders the assignment of these transfers plausibly exogenous to cases, which allows us to more credibly estimate the causal effect of transfers on the chances of a case being decided.

Through our large-*n* empirical analyses, we enrich our findings with insights from interviews with judges and lawyers practicing in India's lower courts.

We draw on three datasets from Uttar Pradesh, India's largest state with a population of over 240 million, for our analyses. The first, judge-position dataset describes the full position histories of 3,608 judges serving in Uttar Pradesh's District Courts. The data come from India's eCourts platform (since around 2006, India's courts have been required to upload a range of data to this website) and from District Court websites. Importantly, this dataset can be used to describe the transfer histories of each judge and may also be used to describe whether courtrooms have fallen vacant. We describe the dataset creation procedure in greater detail in Appendix Section A.4.

Second, we assemble data for the universe of court cases filed in Uttar Pradesh's lower judiciary between 2010–2018. To create this dataset, we scrape the individual case records for the over 8 million cases that Ash et al. (2023) list as being filed in Uttar Pradesh's lower courts between 2010–2018 from the eCourts platform.³ The dataset allows us to thickly describe each case, including the case type (civil, criminal or bail), the precise laws that the case was filed under, and the identities of the petitioners and respondents. The data also allow us to document the status of the case (whether it is decided or pending) as well as details on the number and timing of hearings conducted.

Lastly, we assemble a variety of state election data from the Election Commission of India, the Association for Democratic Reforms (ADR) and the replication archives of Poblete-Cazenave (2023). These data allow us to describe the 2007, 2012 and 2017 elections to Uttar Pradesh's state legislature in rich detail, including the full candidate list, detailed candidate characteristics (including gender, age, education, wealth and criminal backgrounds) and the votes that they

³ Re-scraping these data yields a number of new fields—including the number of hearings and updated indicators for whether a case was decided—absent in the original Ash et al. (2023) dataset.

received.

We merge these three data sources—on judge transfers, court cases and elections—to conduct the analyses described above. For our first analysis, used to establish that transfers are frequent and politicized, we merge the judge-position and elections datasets. The resulting dataset allows us to describe judge transfers and to relate politicians with transfers. For the second analysis, used to explore the effects of judge transfers on courtroom productivity and case delays, we merge the judge-position and court case datasets and summarize the resulting data in Appendix Table 12.

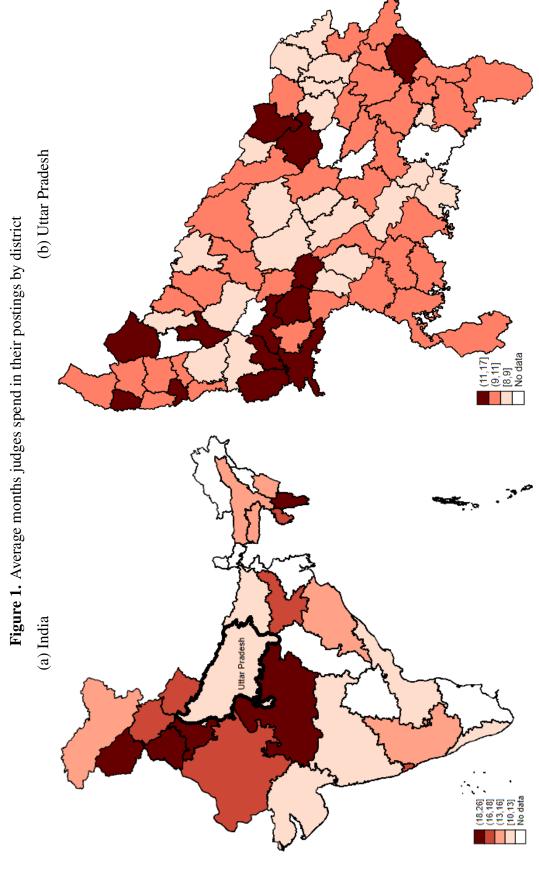
4 Transfers are Frequent and Politicized

The judge-positions dataset suggests that judicial transfers are frequent, thereby confirming H_1 . Judges are transferred across positions (that is, courtrooms or courts within districts) once every 10 months and are moved across administrative districts every 2.3 years.

Figure 1 maps the cross- and within-state district variation in judges' time in their postings. It reveals that there is substantial cross and within-state variation in judge transfers. For example, judges in Uttar Pradesh and Gujarat spend an average of 10 months in their positions, even as judges in Chhattisgarh, Punjab, and Haryana are in their positions for more than two years. Strikingly, the variation within states is also substantial, with judges in Uttar Pradesh—the state that is the focus of our analyses—spending 8 to 17 months in their positions. To our knowledge, this is the first systematic documentation of the frequency with which India's lower court judges are transferred and its spatial variation.

To test for the politicization of judge transfers, we employ the augmented difference-in-difference estimator described previously (equation 1). We model judge transfers in each month-year as a function of state politician characteristics and constituency, month-year, judge and court type fixed effects. The results of these analyses are summarized in Table 1.

In column 1, we test the hypothesis that politicians from the ruling party are particularly likely to be able to influence transfers because they are more influential (H_2) ; we test the hypothesis that



Source: Own calculations, based on new judge data scraped from the e-Courts website.

politicians charged with crimes cause more transfers because they have the incentive to do so (H_3) in column 2. In column 3, we examine the interaction of these terms, examining whether ruling party politicians charged with crimes are particularly likely to cause transfers.

In panel A of the table, we examine the correlates of all transfers. Regressions 1 and 2 do not confirm H_2 and H_3 , whereas regression 3 suggests that ruling party politicians charged with crimes increase the chances of a transfer in the average courtroom-month by 18%. This constitutes clear evidence of politicization. In Panel B, we examine the effects of politician characteristics on retirements. Consistent with expectations, and since judge retirements occur at precisely age 60, retirements are not correlated with politician characteristics. Neither are collateral transfers (Panel C). Transfers that are not retirements or caused due to retirements are politicized (Panel D).

Second, we note that a major cause of judge transfers is the strict recruitment date-based seniority system that the judicial system follows, for reasons of fairness and to insulate itself against politicization. This system operates as follows: when a judge transfer (any judge transfer, whether it is initiated for political or apolitical reasons) creates a vacancy in a courtroom, the next most senior judge (that is, the judge with the same rank with the earliest recruitment date) in that court will be moved to the vacant courtroom. This will then create yet another vacancy, which the second next most senior judge will be moved to fill, and so forth.

We highlight two aspects of the seniority system. First, by ensuring that judge assignments follow a rule, the seniority system does indeed make it more difficult for politicians to assign judges to specific positions. In other words, although politicians can and do successfully lobby to have judges transferred out of positions, they cannot precisely control which judges get assigned to fill in the resulting vacancies. Second, a possibly unintended effect of the seniority system is that it magnifies the effects of transfers by prompting a large number of collateral or cascading transfers in their wake. Even rule-based transfers, such as due to age-based retirements, have cascading effects. As a result, most judge transfers are in fact collateral or cascading transfers due to other transfers.

In our data, while 3% of judge transfers are due to retirements, 12% are due to the cascading

Table 1. Judge transfers are correlated with politician characteristics

		-	
	1	2	3
Panel A: Transfers			
Politician is a ruling party member	-0.00444		-0.0107***
	(0.00325)		(0.00390)
Deliticion is showed with a suize	·	0.00104	-0.00766
Politician is charged with a crime		0.00194	
		(0.00342)	(0.00560)
Politician is a ruling party member ×			0.0145**
Politician is charged with a crime			(0.00662)
Observations	108238	108238	108238
Adjusted <i>R</i> -squared	0.20	0.20	0.20
Dependent variable mean	0.08	0.08	0.08
	0.00	0.00	0.00
Panel B: Retirements	0.000040		0.00145
Politician is a ruling party member	-0.000849		-0.00145
	(0.000702)		(0.000902)
Politician is charged with a crime		-0.000811	-0.00188*
		(0.000690)	(0.00113)
Politician is a ruling party member ×			0.00166
Politician is charged with a crime			(0.00100
Observations	108238	108238	108238
Adjusted R-squared	0.01	0.01	0.01
Dependent variable mean	0.00	0.00	0.00
Panel C: Collateral transfers			
Politician is a ruling party member	0.000369		-0.000249
	(0.00192)		(0.00228)
Dolitician is abanged with a anima	, , ,	0.000286	-0.000650
Politician is charged with a crime		0.000386	
		(0.00256)	(0.00371)
Politician is a ruling party member ×			0.00141
Politician is charged with a crime			(0.00290)
Observations	108238	108238	108238
Adjusted <i>R</i> -squared	0.07	0.07	0.07
Dependent variable mean	0.01	0.01	0.01
Panel D: Other transfers (all transfer		nts - collater	
Politician is a ruling party member	-0.00412		-0.00942***
	(0.00305)		(0.00364)
Politician is charged with a crime		0.00236	-0.00561
		(0.00365)	(0.00543)
Politician is a ruling party member ×			0.0121**
Politician is charged with a crime			(0.00587)
Observations	108238	108238	108238
Adjusted R-squared	0.18	0.18	0.18
Dependent variable mean	0.06	0.06	0.06
Constituency fixed effects	√	√	√
Month-year fixed effects	· ✓	√	· ✓
Judge fixed effects	· ✓	✓	✓
Court type fixed effects	· ✓	√	· ✓
		-	

Notes: Standard errors are clustered by politician. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for details.

effects of retirements. For instance, when Judge Aftab Alam Khan retired in 2018 from courtroom 2 of the District and Sessions Court (D&S) in Barabanki District Court Complex, the courtroom was assigned to Pankaj Kumar Upadhyay, who earlier held charge of Courtroom 32 of the D&S court. Courtroom 32 got assigned to Anupama Nigam as an additional charge, who then manages the workload of both courtroom 32 and courtroom 5.⁴

5 Transfers Reduce Judge Productivity and Increase Case Time to Decision

To examine the effects of transfers on courtroom productivity, we estimate equation 2 using the number of decided cases as the outcome variable. The results of this analysis are summarized in Table 2. The third, saturated model, which includes dummy variables for whether a courtroom experienced a transfer in a month and dummies for the quarter before and after, suggests that judge transfers do indeed depress courtroom productivity. In the month of a transfer, a courtroom issues eight or 20% fewer decisions, whereas in each of the three months after a transfer, a courtroom issues nine fewer decisions. Altogether, in the seven months around a transfer, courtrooms issue cumulatively 45 fewer decisions than they would have otherwise. This is equivalent to a statistically and substantively 1.2 months worth of lost court productivity.

To increase our confidence in our finding that transfers do indeed *cause* case delays, we rerun our regressions while disaggregating the total transfers variable into transfers due to retirements, collateral transfers due to retirements, and transfers for other reasons. As described in the research design section, we have reasons to believe that retirement and collateral transfers are likely to be exogenous to courtrooms. The results of the fully saturated model (Panel B, regression 3) confirm that transfers due to retirements, which are predetermined, do indeed reduce court productivity.

In the next two columns, we confirm other observable implications of our theory. First, transfers reduce the number of hearings a courtroom conducts to a statistically and substantively significant

⁴ Moog (1994, 24) observed the operation of this system in the 1980s, remarking that "This occurred in Varanasi District when the civil judge received a promotion to additional district judge and was transferred to another district. The first additional civil judge became a civil judge, and all the other additional civil judges moved up one position."

Table 2. Transfers reduce courtroom productivity

	Numb	er of cases of	lecided	No. of hearings	Court vacant (0/1)	Cases heard/ decided	Age decided cases (years)
	1	2	3	4	5	6	7
Panel A: Transfer_quarter before			-3.087***	-5.301	0.0434***	9.465***	-0.0372***
Transfer month	4.549*** (1.237)	-7.970*** (0.967)	(0.909) -8.204*** (0.940)	(4.261) -14.71*** (4.061)	(0.00256) 0.144*** (0.00451)	(1.520) 16.94*** (1.832)	(0.0113) -0.110*** (0.0141)
Transfer_quarter after	(1.237)	(0.507)	-9.250*** (1.037)	-24.42*** (4.303)	0.0435*** (0.00268)	27.90*** (1.743)	-0.0258** (0.0117)
Observations Adjusted <i>R</i> -squared	143691 0.00	143691 0.31	128642 0.31	128690 0.60	122975 0.27	128632 0.22	93587 0.37
Panel B: Retirement transfer_quarter before			-1.570 (1.731)	3.460 (11.11)	-0.0143** (0.00605)	6.745 (4.662)	-0.0143 (0.0298)
Retirement transfer month	3.846 (2.988)	-10.81*** (1.918)	-11.54*** (2.055)	-26.60** (11.53)	0.0706*** (0.0138)	7.955** (3.779)	-0.156*** (0.0402)
Retirement transfer_quarter after			-6.922*** (2.368)	-14.68 (10.69)	0.0796*** (0.0144)	29.64*** (7.486)	-0.0556* (0.0321)
Collateral transfer_quarter before			-3.490*** (1.095)	-3.754 (8.134)	0.0303*** (0.00585)	-2.105 (2.225)	-0.0754*** (0.0195)
Collateral transfer month	-6.844*** (1.921)	-10.22*** (1.305)	-9.725*** (1.357)	-25.08*** (8.259)	0.144*** (0.00970)	2.159 (2.314)	-0.197*** (0.0269)
Collateral transfer_quarter after			-5.944*** (1.190)	-26.57*** (8.146)	0.0421*** (0.00671)	14.32*** (2.616)	-0.0987*** (0.0206)
Other transfer_quarter before			-2.931*** (0.993)	-6.110 (4.573)	0.0467*** (0.00288)	11.08*** (1.689)	-0.0298** (0.0123)
Other transfer month	6.639*** (1.555)	-7.284*** (1.116)	-7.680*** (1.074)	-12.20*** (4.478)	0.148*** (0.00488)	19.97*** (2.149)	-0.0877*** (0.0159)
Other transfer_quarter after			-9.364*** (1.140)	-22.55*** (4.546)	0.0376*** (0.00298)	28.28*** (1.946)	-0.00787 (0.0129)
Observations Adjusted <i>R</i> -squared Dependent variable mean	143691 0.00 37.57	143691 0.31 37.57	128642 0.31 38.12	128690 0.60 388.20	122975 0.27 0.05	128632 0.22 50.69	93587 0.37 1.47
Courtroom fixed effects Month-year fixed effects		✓ ✓	✓ ✓	✓ ✓	√ √	√ √	√ √

Notes: The dependent variables are the count of cases decided, the number of hearings conducted, an indicator for whether the court is vacant or not, the ratio of the number of hearings conducted to decisions issued in a courtroom-month-year, and the years since the filing of decided cases. The independent variables in Panel A are indicators of whether the courtroom experiences a transfer in the previous quarter, current month, or next quarter. Independent variables in Panel B are retirement transfers, collateral transfers due to retirements, and others. Standard errors clustered by courtroom. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for details.

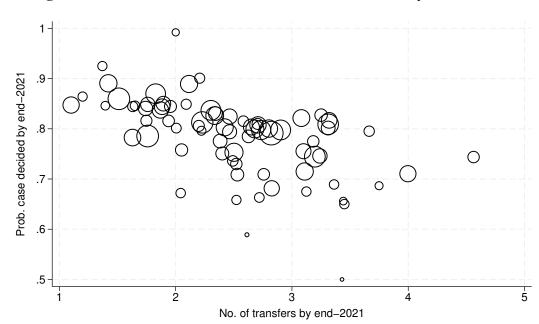


Figure 2. Cases in districts with more transfers are less likely to be decided

Notes: Data are for Uttar Pradesh. Circle sizes are proportionate to the number of cases filed in each district.

degree. In other words, transfers decrease productivity as measured by the number of decisions issued and the number of hearings held. Second—this is a mechanism that explains these results—transfers increase recorded court vacancies, even as we would expect vacancies to be undercounted since judges transferred into courtrooms typically assume their newly assigned courtrooms with some delay. In the last column, we show that transfers increase the ratio of hearings to decisions in a courtroom, which is consistent with the fact that hearings are easier to conduct than are decisions to issue.

We next turn to our case-level analysis, which for now is based on an analysis of a randomly chosen 10% sample drawn from the approximately 8 million cases in our data. To examine the effects of transfers on judicial decision-making, we start by graphically examining the bivariate relationship between the mean transfers experienced by cases in Uttar Pradesh's 74 districts and the probability that a case was decided. Both variables are measured as of end-2021. Figure 2 shows that the two are negatively correlated, suggesting that transfers worsen judicial decision-making.

To rigorously explore this relationship, we employ OLS regressions to estimate equation 3, as

summarized in Table 3. Regression 1 in panel A replicates the negative bivariate relationship between transfers and the probability that a case is decided, illustrated in Figure 2. In the next regressions, we add case-type fixed effects, courtroom fixed effects, their interactions, and filing month-year fixed effects. The fully saturated model, in column 4, suggests that transfers substantially slow decision-making: one judge transfer (that is, a 0.2 standard deviation increase in mean transfers) decreases the chances that a case will be decided by end-2021 by 5.1 percentage points or 6.5%. This is a statistically and substantively meaningful effect.

As we have argued in the previous section, judge transfers are appreciably shaped by politics. For the case-level analysis, since we have over 8 million cases and cumulatively just 22,128 judge transfers, not all of which will be politicized, transfers are likely to be exogenous to most individual cases. In other words, if each transfer occurs because of say two cases, 44,256 out of over 8 million cases (0.005%) would be endogenous. This suggests that transfers are likely to cause judicial delays.⁵

To increase our confidence in our finding that transfers do indeed *cause* case delays, we disaggregate the total transfers variable into transfers due to retirements, collateral transfers due to retirements, and for other reasons. Since the first two subsets of transfers are predetermined, they are likely to be exogenous to court cases. The results of the fully saturated model (Panel B, regression 4) suggest that transfers due to retirements reduce the probability of a case being decided by 4.5 percentage points or 5.8%. This is very similar to the estimated effect of total transfers in panel A.⁶

Our results are robust to re-specifying the transfer variables as dummies, logging them, and

⁵ In addition, sensitivity analysis due to Cinelli and Hazlett (2020) as applied to our preferred specification (regression 4 in Panel A) suggests that an omitted variable would have to explain at least 59% of the residual variation in the treatment and outcome to fully account for the observed estimated effect. Such a confounder is highly unlikely in that it would need to explain more than several hundred times the variation that case complexity (measured using the number of sections a case if filed under) explains.

⁶ When do transfers have a particularly negative effect on judicial decision-making? To explore this question, we re-measure the dependent and independent variables to within 1, 2 and 3 years of a case being filed and rerun our analyses. The regressions in panel A of Appendix Table 13 suggest an additional transfer particularly slows judicial decision-making in the early years of the case, with the marginal effect ranging from 17–20% in the first three years of a case, which is higher than the average effect until end-2021.

Table 3. Transfers reduce the chances of a case being decided

	Cae	Case decided by end-2021 (0/1)	' end-2021 (0	7/1)	Judge vacancy (0/1)	No. of vacant spells	Vacant days	No. of hearings
	-	2	3	4	S	9	7	∞
Panel A: Number of transfers	-0.0520*** (0.00291)	-0.0504*** (0.00318)	-0.0507*** (0.00372)	-0.0507***	0.0126***	0.0371***	4.314***	3.667***
Observations Adjusted R-squared	817052 0.34	817052 0.36	817043 0.44	817027 0.45	817027 0.23	817027 0.26	817027 0.14	570031 0.37
Panel B: Number of retirement transfers	-0.0379***	-0.0371*** (0.00643)	-0.0450*** (0.00675)	-0.0452***	0.0392***	0.0675***	-3.709*	4.837***
Number of collateral transfers	-0.0155*** (0.00385)	-0.0142*** (0.00371)	-0.0110^{***} (0.00299)	-0.0102*** (0.00266)	0.000192 (0.00204)	0.0108^{**} (0.00494)	0.598 (0.881)	4.199*** (0.348)
Number of other transfers	-0.0586*** (0.00270)	-0.0570*** (0.00279)	-0.0577*** (0.00359)	-0.0578*** (0.00282)	0.0138^{***} (0.000775)	0.0404***	5.237*** (0.534)	3.595*** (0.121)
Observations Adjusted R-squared Dependent variable mean	817052 0.36 0.78	817052 0.38 0.78	817043 0.46 0.78	817027 0.46 0.78	817027 0.23 0.12	817027 0.27 0.17	817027 0.14 37.54	570031 0.37 9.31
Case-specific controls Case type fixed effects Courtroom fixed effects Case type X courtroom fixed effects Filing month-year fixed effects		>>	>>> >	> >>	> >>	> >>	> >>	> >>

Standard errors clustered by courtroom for regressions in columns 1-3; standard errors are clustered by case type X courtroom for the regressions in columns 4–7. Case-specific controls are a count of the number of sections of the law a case is filed under (a measure of Notes: The dependent variable is an indicator for whether a case was decided; the independent variable is the number of transfers. case complexity), and a dummy for whether these data are missing. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for details. winsorizing them too (see Appendix Table 14). Specifying the years to decision as the dependent variable also yields consistent results, although this analysis naturally only uses data on decided cases (see Appendix Table 16).

In Table 4, we examine the heterogeneity in the effect of transfers. In columns 1–4, we examine the degree to which transfers affect cases that are classified into the mutually exclusive, collectively exhaustive categories of civil, criminal, bail and unclassified cases (see Appendix Section A.3.3 for coding rules). Transfers decrease the chances of all case types being decided at end-2021, with transfers having somewhat larger effects on civil cases, and smaller effects on criminal ones. Transfers have the smallest effect on bail cases, a pattern to which we return later.

In columns 5–9, we examine the varying effects of transfers across courts ordered from most junior to senior, starting with family courts, then moving onto junior division courts, senior division courts, courts of the Chief Judicial Magistrate, and ending with District and Session Courts, which are the senior-most courts in a district. We find that judge transfers are more disruptive to cases filed in junior courts: whereas an additional transfer decreases the chance of a case being decided by over 16% in family courts, they decrease the chances of a case being decided at end-2021 by 5% in District and Session courts.

Transfers not only slow judicial decision-making, but they also alter the kinds of decisions that are issued by courts. We document this effect in Appendix Table 15, where we employ a dummy for whether a decided case was "uncontested" as the dependent variable. Uncontested cases are ones where the parties fail to contest or agree on the facts of the case, thereby allowing the judges to focus on applying the law. In principle, uncontested cases should be quicker to decide. Despite this, transfers—which we have shown delay judicial decision making—also make it more likely that the decisions that judges do issue are uncontested, possibly because transfers cause litigants to be less likely to show up in court.

To examine the mechanisms by which transfers reduce judge productivity, we test whether transfers cause cases to be unassigned to judges for spells of varying degrees (H_9), and whether

Table 4. Heterogeneous treatment effects by case type (columns 1–4) and court type (columns 5–9)

					Case decided (0/1)	1 (0/1)			
Sample:	Civil	Criminal cases	Bail cases	Unclassified cases	Family Court	Civil judge Junior div	Civil judge Senior div	Chief Judicial Magistrate	District and Session Judge
	1	2	3	4	5	9	7	8	6
Panel A: Number of transfers	-0.0551*** (0.00691)	-0.0493*** (0.00361)	-0.0439*** (0.0144)	-0.0525*** (0.00455)	-0.113*** (0.00492)	-0.0690***	-0.0919*** (0.00428)	-0.0566*** (0.00394)	-0.0377*** (0.00152)
Observations Adjusted R-squared	95505	465375 0.41	91860	164281	62332 0.60	98318 0.49	71209	385852 0.46	186487 0.53
Panel B: Number of retirement transfers -0.0341*** (0.00525)	-0.0341*** (0.00525)	-0.0418***	-0.0325** (0.0147)	-0.0707***	-0.0854***				-0.0368*** (0.00564)
Number of collateral transfers	-0.00126 (0.00417)	-0.00824** (0.00356)	-0.0390*** (0.0109)	-0.0170^{***} (0.00549)	-0.0842*** (0.0122)				-0.0178*** (0.00221)
Number of other transfers	-0.0670^{***} (0.00553)	-0.0560*** (0.00396)	-0.0464*** (0.0151)	-0.0584*** (0.00337)	-0.129*** (0.00647)	-0.0690*** (0.00369)	-0.0919*** (0.00428)	-0.0566*** (0.00394)	-0.0470*** (0.00214)
Observations Adjusted R-squared Mean dependent variable	95505 0.50 0.63	465375 0.43 0.78	91860 0.23 1.00	164281 0.49 0.77	62332 0.61 0.70	98318 0.49 0.68	71209 0.57 0.70	385852 0.46 0.83	186487 0.54 0.81

Notes: The independent variables are defined as transfers until end-2021. All regressions control for a count of the number of sections while serving in Chief Judicial Magistrate courts. Standard errors clustered by case type X courtroom. * p < 0.10, *** p < 0.05, *** fixed effects and filing month-year fixed effects. No judges retired while serving in Civil Judge Junior and Senior division courts, or of the law a case is filed under (a measure of case complexity), a dummy for whether these data are missing, case type X courtroom p < 0.01. See text for details. they cause cases to require additional hearings (H_{10}).

Regression 5 of Table 3 suggests that an additional transfer increases the chances of a case experiencing any vacancy by over 10%. Regression 6 suggests a similarly large effect if we employ the number of vacancies as the outcome variable. Lastly, regression 7 suggests that an additional transfer causes a case to be unassigned to any judge by 4 days or over 10%. As before, the results are robust to using promotion and retirement transfers as the key independent variable. These results are consistent with the courtroom analysis, which showed that transfers increase the chances of a courtroom-level vacancy.

We also test whether transfers cause cases to have more hearings, thereby contributing to judicial delays. While the average case in our data has 9.3 hearings, regression 8 suggests that each additional transfer causes an additional 3.7 or 39% hearings (the estimates are larger for retirement transfers). Consistent with this, in interviews, judges confirmed that transfers do indeed slow down cases by causing arguments to be re-heard. One judge noted: "There have been cases that have been heard by 10 judges, and still no decision has been issued. If a judge is transferred after arguments have been heard once, sometimes – but not always – arguments need to be re-heard" (interview J1, May 2022). Another judge noted that "Most orders require to be re-heard – a new judge may have a new angle to a case" (interview J3, July 2022).

Together, these results provide support for both hypothesized mechanisms: transfers increase the chances that a case is unassigned to a judge for a while, and increase the total number of hearings experienced by cases.

⁷ In interviews, judges suggested additional mechanisms by which transfers could decrease judge productivity. First, in anticipation of transfers and for difficult cases, judges tend to defer scheduling hearings (interview J4, July 2022) and even issuing decisions for cases that are fully heard (interview J1, May 2022). To be clear, while judges would always have an incentive to put off difficult cases, transfers exacerbate this problem since they make it likely that the cases will be the next judge's problem. Second, judges noted that adjusting to new positions takes time and leads to reduced productivity in the initial months (interview J5, August 2022).

5.1 Reducing the effects of transfers

The analysis thus far suggests that judge transfers are disruptive to the timely disposition of court cases. That said, the data hint at possible remedies to the problem.

First, consider the benefits of planning. Judge transfers can be "scheduled" or "nonscheduled." In Uttar Pradesh, planned, on-cycle, annual transfers typically occur in September and October. Retirements occur in the week that a judge turns 60, and collateral transfers in our coding occur in the transfer month or upto two months after. We code all these transfers as "scheduled." In our interviews, judges noted the disruptive potential of scheduled transfers (interview J5, August 2022), also noting that the annual performance review system, which accounts for the number of decided cases, incentivizes judges to issue decisions despite disruptions.

In contrast to scheduled transfers, other "nonscheduled" transfers are likely to be endogenous, politicized and even more disruptive to judicial decision-making. Indeed, the disruption might be the point of the transfers. Consistent with this, regression 1 in Table 5 indeed suggests that off-cycle transfers reduce the probability that a case is decided by end-2021 to a substantively and statistically significantly greater degree than on-cycle transfers, although the effect of the latter is also significantly different from 0. In other words, planning or scheduling transfers in advance helps attenuate their negative effects.

Rules also appear to help. As elsewhere, strong norms ensure that bail cases in India are resolved quickly. Consistent with this, regression 2 suggests that transfers impede the disposition of bail cases less than other cases. Regression 3 suggests that this pattern is apparent when considering promotion and other transfers too.

Importantly, the policy implications of these findings—undertake planned rather than unplanned transfers, and require cases be decided quickly—do not require fewer transfers per se, but rather suggest ways to reduce the negative effects of transfers, whatever their frequency.

Table 5. Possible Fixes: Planning and rules potentially attenuate the negative effects of transfers

	C	ase decided (0/1)
	1	2	3
Number of scheduled transfers	-0.0483*** (0.00407)		
Number of nonscheduled transfers	-0.0517*** (0.00318)		
Number of transfers		-0.0507*** (0.00270)	
Number of transfers X Bail cases		0.00799 (0.0117)	
Number of retirement transfers			-0.0468*** (0.00608)
Number of retirement transfers X Bail cases			0.0107 (0.0157)
Number of collateral transfers			-0.00933*** (0.00258)
Number of collateral transfers X Bail cases			-0.0215* (0.0114)
Number of other transfers			-0.0579*** (0.00284)
Number of other transfers X Bail cases			0.0121 (0.0121)
Observations Adjusted <i>R</i> -squared Mean dependent variable	817027 0.45 0.78	817027 0.45 0.78	817027 0.46 0.78

Notes: The independent variables are defined as transfers until end-2021. All regressions control for a count of the number of sections of the law a case is filed under (a measure of case complexity), a dummy for whether these data are missing, case type X courtroom fixed effects and filing month-year fixed effects. Standard errors clustered by case type X courtroom. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for details.

6 Discussion and Conclusion

We have theorized and shown—using a variety of research designs—that judge transfers are frequent and politicized, and that they slow judicial decision-making.

In our study, the average case in Uttar Pradesh experienced 3.5 transfers. Reducing these transfers to 2.5 per case would improve the proportion of cases decided by the end of our study period by 6.5%. Reducing them further to below 0.5 transfers per case—which would ensure that the average case does not experience a transfer—would improve the proportion of decided cases by approximately 20%.

Transfers slow decision-making as they create court vacancies and increase the hearings needed to decide cases. Planning and rules can attenuate the negative effect of transfers: scheduled transfers have less pernicious effects than others, and bail cases—which need to be decided quickly—are less affected by transfers.

Although judicial transfers could have benefits, such as reducing judicial corruption and improving judge capabilities, it seems unlikely that these would necessitate transferring judges with the high frequency that they are in India.

A comparison of the benefits of reducing transfers versus hiring more judges, which is the most frequently prescribed solution to the high case pendency across the developing world, is instructive. Increasing judge staffing is more expensive and politically difficult (Chandrashekaran et al. 2024). In contrast, reducing judge transfers requires no additional budgetary outlays and is less politically difficult.

A major innovation of our study is to extend the study of the bureaucracy, which has thus far focused on the executive, to the judiciary. In so doing, we show that judges suffer from the same pathology—frequent, politicized transfers—as do bureaucrats in many countries. Although the literature on bureaucratic transfers has suggested the possible negative consequences of frequent transfers, it has difficulty estimating such effects because the outputs of bureaucrats is varied and

is therefore difficult to systematically measure. Since all judges decide cases, switching focus to judges solves this problem, allowing to us to more easily document some of the welfare costs of frequent transfers.

Our paper furthers the small, new data-driven literature on the Indian judicial system, extending it to the major and understudied issue of judicial delays. Whereas much of the policy literature on judicial delays notes that the system is severely underresourced, we show how the system can do more with its existing resources by simply reducing the frequency of judge transfers.

The problem of judicial delays is not unique to India but plagues rich and poor countries worldwide. By tracing the effects of the frequent transfer of judges on case disposal, we extend the broader comparative literature on judicial efficiency, which has focused on the effects of relatively apolitical factors such as technology and case complexity. In contrast, we argue that a major cause of judicial delays is the politicized, frequent transfers of judges.

References

- Agnihotri, Anustubh, Aditya Dasgupta, and Devesh Kapur (2024). Bureaucrat assignments as instruments of political control: Evidence from land administration officials in india. Working paper.
- Aney, Madhav S., Shubhankar Dam, and Giovanni Ko (2021). Jobs for justice (s): Corruption in the supreme court of India. *The Journal of Law and Economics* 64(3), 479–511.
- Ash, Elliott, Sam Asher, Aditi Bhowmick, Sandeep Bhupatiraju, Daniel L. Chen, Tanaya Devi, Christioph Goessmann, Paul Novosad, and Bilal Siddiqi (2023). In-group bias in the indian judiciary: Evidence from 5 million criminal cases. (637).
- Bharti, Nitin Kumar and Jonathan Lehne (2024). Justice for all? the impact of legal aid in india. Working paper.
- Bharti, Nitin Kumar and Sutanuka Roy (2023). The early origins of judicial stringency in bail decisions: Evidence from early childhood exposure to hindu-muslim riots in india. *Journal of Public Economics* 221, 104846.
- Bhavnani, Rikhil R. and Alexander Lee (2018). Local embeddedness and bureaucratic performance: Evidence from india. *Journal of Politics* 80(1), 71–87.
- Bhavnani, Rikhil R. and Alexander Lee (2021). Does affirmative action worsen bureaucratic performance? evidence from the indian administrative service. *American Journal of Political Science* 65(1), 5–20.
- Bhavnani, Rikhil R., Alexander Lee, and Soledad Artiz Prillaman (2024). Coethnic rivalry and solidarity: The political economy of politician-bureaucrat cooperation in india. Working paper.
- Brierley, Sarah (2020). Unprincipled principals: Co-opted bureaucrats and corruption in ghana. *American Journal of Political Science* 64(2), 209–222.

- Chandrashekaran, Sumathi, Shriyam Gupta, and Diksha Sanyal (2024). The long road to becoming a judge: an empirical analysis of litigation around recruitment in india's lower judiciary. *Indian Law Review* 8(3), 281–305.
- Chemin, Matthieu (2009). Do judiciaries matter for development? evidence from india. *Journal of Comparative Economics* 37(2), 230–250.
- Chemin, Matthieu (2012). Does the quality of the judiciary shape economic activity? evidence from a judicial reform in india. *Journal of Law, Economics, and Organization* 28(3), 460–485.
- Cinelli, Carlos and Chad Hazlett (2020). Making sense of sensitivity: Extending omitted variable bias. *Journal of the Royal Statistical Society Series B: Statistical Methodology* 82(1), 39–67.
- Cohen, Mathilde (2018). Judicial Diversity in France: The Unspoken and the Unspeakable. *Law* & *Social Inquiry* 43(04), 1542–1573.
- Craigie, Terry-Ann, Vis Taraz, and Mariyana Zapryanova (2023). Temperature and convictions: evidence from india. *Environment and Development Economics* 28(6), 538–558.
- Dakolias, Maria (2014). Court performance around the world: a comparative perspective. Technical Paper 340, World Bank.
- Dincecco, Mark, James Fenske, Anil Menon, and Shivaji Mukherjee (2022). Pre-colonial warfare and long-run development in india. *The Economic Journal* 132(643), 981–1010.
- Ding, Fangda, Jiahuan Lu, and Norma M. Riccucci (2021). How bureaucratic representation affects public organizational performance: A meta-analysis. *Public Administration Review* 81(6), 1003–1018.
- Galanter, Marc (2009). The myth of litigious india. *Jindal Law Review 1*, 65–73.
- Grajzl, Peter and Shikha Silwal (2020). Multi-court judging and judicial productivity in a career judiciary: evidence from nepal. *International Review of Law and Economics* 61, 105888.

- Guerra, Alice and Claudio Tagliapietra (2017). Does judge turnover affect judicial performance? evidence from italian court records. *Justice System Journal* 38(1), 52–77.
- Herbst, Jeffrey (2000). *States and power in Africa: Comparative lessons in authority and control*. Princeton University Press.
- Iyer, Lakshmi and Anandi Mani (2012). Traveling agents: political change and bureaucratic turnover in india. *Review of Economics and Statistics* 94(3), 723–739.
- Jassal, Nirvikar (2024). Does victim gender matter for justice delivery? police and judicial responses to women's cases in india. *American Political Science Review 118*(3), 1278–1304.
- Kritzer, Herbert M. (2002). Legal Systems of the World: A Political, Social, and Cultural Encyclopedia. ABC-CLIO.
- Malleson, Kate and Peter H. Russell (Eds.) (2006). *Appointing Judges in an Age of Judicial Power:*Critical Perspectives from around the World. University of Toronto Press.
- Mehmood, Sultan, Avner Seror, and Daniel L. Chen (2023). Ramadan fasting increases leniency in judges from pakistan and india. *Nature Human Behavior* 7(6), 874–880.
- Moog, Robert (1992/1994). Delays in the Indian Courts: Why the Judge Don't Take Control. *Justice System Journal* 16(1), 19–36.
- Muralidharan, Karthik (2024). Courts and Justice. Penguin Viking.
- Northcote, Stafford H. and Charles E. Trevelyan (1854). Report on the organisation of the permanent civil service.
- Orina, Nabil M. (2016). Independence of criminal judges in Kenya current issues. *KAS African Law Study Library Librairie Africaine d'Etudes Juridiques 3*(3), 453–460.
- Poblete-Cazenave, R. (2023). Do politicians in power receive special treatment in courts? evidence from india. *American Journal of Political Science*.

Pozas-Loyo, Andrea and Julio Ríos-Figueroa (2018, November). Anatomy of an informal institution: The 'Gentlemen's Pact' and judicial selection in Mexico, 1917–1994. *International Political Science Review* 39(5), 647–661.

Purohit, Bhumi (2024). Bureaucratic discretion against female politicians. Working paper.

Ramseyer, J. Mark (2012). Talent matters: Judicial productivity and speed in japan. *International Review of Law and Economics* 32(1), 38–48.

Rao, Manaswani (2024). Front-line courts as state capacity: Evidence from india. Working paper.

Suryanarayan, Pavithra and Steven White (2021). Slavery, reconstruction, and bureaucratic capacity in the american south. *American Political Science Review 115*(2), 568–584.

Tilly, Charles (1990). Coercion, Capital, and European States. Blackwell Publishing.

Vasishth, Mahima (2022). Local media reports about sexual crimes and judicial outcomes in india.

Presented at the 2022 APPAM Fall Research Conference.

Voigt, S. (2016). Determinants of judicial efficiency: a survey. *European Journal of Law and Economics* 42(2), 183–208.

Wade, Robert (1982). The system of administrative and political corruption: Canal irrigation in south india. *The Journal of Development Studies 18*(3), 287–328.

Xu, Guo, Marianne Bertrand, and Robin Burgess (2023). Organization of the state: home assignment and bureaucrat performance. *The Journal of Law, Economics, and Organization* 39(2), 371–419.

Zhu, Jintao (2024). The Fall of the Patron Saint of Justice: How Judge Movement affects Court Rulings in China.

A Data Appendix

A.1 Background

The judicial system in India is hierarchically divided into three levels - the Supreme Court (tat the highest, national level), the High Courts (at the state level) and the District Courts (at the district level). The district courts are also often known as the "lower judiciary" and is the first line of complaint for a litigant.

Our study is based in Uttar Pradesh, wherein each district has one or more court complexes, which have several levels of judges practicing in them. Judges are either directly recruited through a comprehensive examination process to the lowest rank, but can also be recruited from the bar following years of legal practice. At any point in time, judges are assigned to either civil, criminal or revenue courts, and each position roughly lasts for about 1 year. We define a "position" as being assigned to a particular courtroom.

The highest judge in a district court is the "District and Sessions Judge" who can hear both civil and criminal cases at the district level. The "Civil Judge Junior Division" is the lowest ranking judge who can hear civil cases - this is typically the position held by new "direct" recruits. The lowest ranking counterparts for criminal courts are known as "Judicial Magistrates". The jurisdiction of courts depends on the severity of the case.

There are several courtrooms within a court complex that are of a particular type - and each judge is typically assigned one (or sometimes more than one) "court-rooms" wherein they hear cases. The Allahabad High Court determines the rules for transfers of judges in Uttar Pradesh. According to the rules announced each year, every judge is to be transferred on the completion of three years⁸.

There are a total of 74 court districts in Uttar Pradesh. We capture data for the districts courts within these court districts. There are 164 court complexes, for a total of 509 courts and 5754

⁸ or two years for outlying court (a court outside the district headquarter) or at Sonbhadra district

courtrooms across Uttar Pradesh.

A.2 Data

Our data comes from many sources. The data collection process involved compiling several sources of publicly available data, and scraping court records from the websites of eCourts India.

A.3 Case Data (Dependent Variable)

We collect case data for every district court in Uttar Pradesh from the Indian e-Courts platform - a public-facing software that includes case-level and hearing-level metadata about a case. To put together this dataset, we first use the eCourts identifiers (CINOs) from the judicial data put together by Development Data Lab⁹. These span the universe of cases filed between 2010 and 2018. We augment the case data with additional data, and remove duplicates. The process is described below, and depicted visually in Figure 1.

A.3.1 Augmenting Case Data

We then scrape additional information about each case, to augment the publicly available data with information on hearings and other court-level metadata. We used the computing resources made available by the Center for High Throughput Computing at UW-Madison in order to clean and augment the raw data with additional data by scraping the dcourts websites to get more information on hearings and other case-level metadata (like FIR number, Police Station information, litigant information and so on).

We were able to scrape additional data for about 10.8M cases, which is about 82% of the cases. The cases that could not be scraped were due to server errors.

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⁹ source: https://www.devdatalab.org/judicial-data

A.3.2 De-Duplication due to case transfers

There are two scenarios wherein cases move from one court to another. The first is when a case

is transferred across courts - from one court type to another court type. For example, a case can

move from the Judicial Magistrate court to the Chief Judicial Magistrate court. The second type is

when a case moves across court rooms within the same court type. The former leads to a situation

wherein there are duplicate entries for the same case. These need to be handled. The two scenarios

are elaborated below:

Transferred Cases: Across Courts

A number of cases have been transferred across courts - in such a scenario, the case gets a new

case number. We obtained data that would help us match and exclude these "duplicate" entries in

order to obtain a single identifier for a case record that can help us identify the filing date, decision

status and decision date (if available) for each unique case. On performing this deduplication step,

we end up with about 8.8 million unique case records.

Transferred Cases: Across Court Rooms

A number of cases have been transferred across court rooms. While these are not assigned new

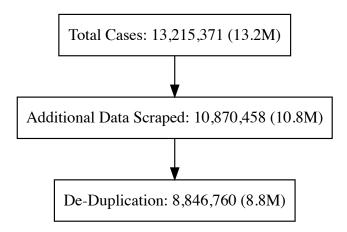
case numbers, we make sure that the outcomes calculated at the court-room level take into account

the correct court-room. For example, in order to calculate the number of hearings conducted in

a court-room, we use information regarding how a case moves through court rooms in order to

compute the correct number of hearings for a case in each court room.

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A.3.3 Case Classification

For the 8.8 million cases, we use the case information to classify the types of cases into categories:

- 1. Civil Cases
- 2. Criminal Cases
- 3. Cheque Bounce Cases
- 4. Bail Cases
- 5. Cases where the state is involved.

We identify civil and criminal cases by using the case metadata (more specifically, we use information about the case type, act, section and FIR details (if available). Broadly, cases under the 'Civil Procedure Code' are classified as civil cases, while those filed under the Indian Penal Code or Criminal Procedure Code are classified as Criminal Cases.

Next, we identify cheque bounce cases as those cases filed under the Negotiable Instruments Act. The NI Act in India involves criminal charges against the accused. Further, we identify bail cases mainly using the case type information. Bail requests can only be made for criminal cases¹⁰

¹⁰ source: https://districts.ecourts.gov.in/sites/default/files/6-Bail%20Anticipatory%
20Bails%20-%20Sri%20M%20Sreenu.pdf

therefore all bail cases are also criminal cases. Finally, we identify the state as a party in the case, by looking at whether the petitioner or respondent are variants of 'UP Government' or 'Indian Government.'

About 77% of the cases are classified into being either civil or criminal cases. 11% are identified as civil, 66% are identified as criminal whereas the case types for the remaining 23% could not be determined.

A little over 4% of civil cases have the state involved - examples of such cases include complaints under the SC / ST Act. All cheque bounce cases and bail cases are criminal cases. Further, we have a small fraction of cases that make bail requests for persons charged for a cheque bounce. All criminal cases have the state as an involved party, and is indicated accordingly (and the same logic also applies to cheque bounce and bail cases).

Case Type	Civil	Criminal	Cheque Bounce	Bail	State
Civil	985490	NA	NA	NA	NA
Criminal	NA	5824242	NA	NA	NA
Cheque Bounce	NA	117137	117137	NA	NA
Bail	NA	958431	4269	958431	NA
State	42278	5824242	117137	958431	6470185

Of the 8.8 million cases, 67% have been decided. We use the nature of disposal to classify the decision type for decided cases.

- 1. Contested Cases (57.7% of decided cases)
- 2. Uncontested Cases (41% of decided cases)
- 3. Could not be categorized as either (1.3% of decided cases)

Case Type	Counts
Contested	3437318
Uncontested	2447889
Other	77236

A.3.4 Aggregating to Court-Room Level Data

The case-level data can be aggregated and summarized at the court-room level. We produce a month-year dataset for all 5754 court rooms in our data. We see data populated for (5754 * 12 months * 9 years) 621432 rows - for each court-room-month-year combination, we compute case-based outcomes and merge additional data about court infrastructure 11 and district characteristics 12. Additional information on this step for each variable is available in a data codebook 13

A.4 Judge Data (Independent Variable)

We also obtain data on judges in all courts in Uttar Pradesh District Courts from two sources: first from the eCourts platform, and second from the website of the Allahabad High Court. These sources have two key differences between them, however both include the judge's name, their designations, the start and end dates of appointment. Importantly, the eCourts data includes the information on court rooms that allows us to link the judge data back to cases, however spans a limited time period. Additionally, the judge profile data scraped from the Allahabad High Court includes information about a judge's entire career, and other metadata, however, this information is not available for (now) retired judges. While we tried to obtain this additional data by filing requests under the "Right to Information" Act, our request was rejected.

The eCourts data has information on judge's start and end dates in each court room, which we use to create our main independent variable on transfers.

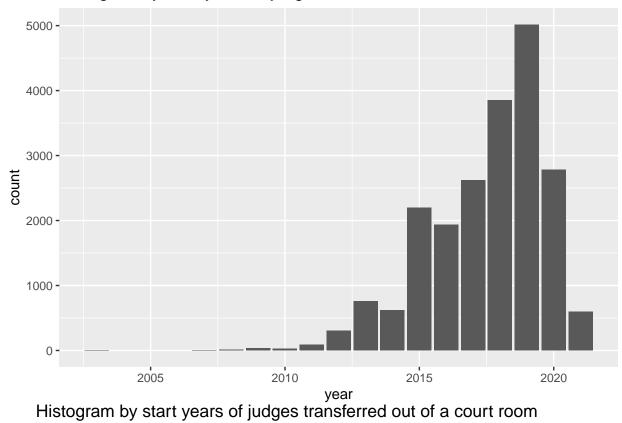
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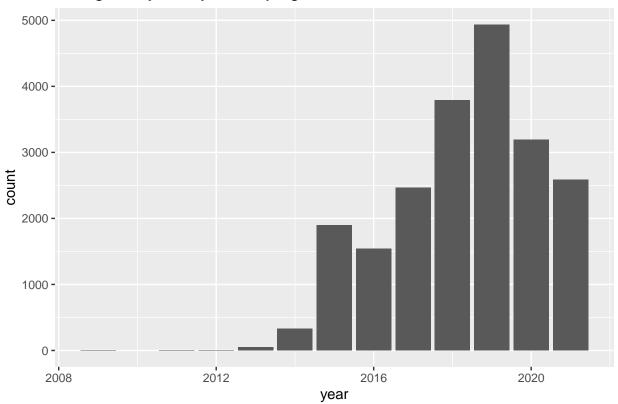
¹¹ source: https://jaldi-vidhilegalpolicy.in/

¹² source: https://www.devdatalab.org/shrug

¹³ link: https://bit.ly/codebook-for-bbj

Histogram by start years of judges transferred into a court room





We compute two variables from this data: transfer_in and transfer_out. transfer_in uses the start_date of a judge in a court room to determine whether a judge was transferred into a court room at a given month-year. transfer_out uses the end_date of a judge in a court room to determine whether a judge was transferred out of a court room at a given month-year. Further, for each transfer, we can see if it was a transfer that moved a judge across districts, across court-complexes, across courts or across court-rooms.

Table 8. Types of transfers IN

Туре	Count
district transfer	3367
court complex transfer	335
court type transfer	6145
court room transfer	12921
type could not be determined	4212

Table 9. Types of transfers OUT

Туре	Count
district transfer	3373
court complex transfer	3693
court type transfer	6137
court room transfer	16769
type could not be determined	4020

Finally, we can also determine the type of each transfer: whether it was a scheduled transfer (based on the judge transfer cycles described below), or whether it was a promotion. The data is described in the table below:

Table 10. Transfers IN with type of transfer

			Not		No Pro-	Promotion and
Туре	Count	Scheduled	scheduled	Promotion	motion	Scheduled
district transfer	3367	1664	1703	420	2946	140
court complex transfer	335	67	268	58	277	10
court type transfer	6145	1754	4391	1083	5055	193
court room transfer	12921	2885	10036	805	12110	107
type could not be	4212	1465	2747	295	3915	102
determined						

Table 11. Transfers OUT with type of transfer

			Not		No Pro-	Promotion and
Type	Count	Scheduled	scheduled	Promotion	motion	Scheduled
district transfer	3373	1695	1678	274	3098	174
court complex transfer	3693	1740	1953	298	3393	181
court type transfer	6137	1872	4265	752	5373	279
court room transfer	16769	5178	11591	1393	15359	505
type could not be	4020	1468	2552	169	3851	80
determined						

A.5 Electoral Cycle Data

We document the dates of all state and national elections conducted in Uttar Pradesh using the information shared by the Election Commission of India on its website.

A.6 Judge Transfer Cycle

We obtained data from the Allahabad High Court for information on "transfer cycles". Typically, judges are transferred after every 2-3 years from a district.

We code the transfer cycles for each year using the notifications shared by the Allahabad High Court. We document the entire "regular" transfer cycle for each year from 2010 to 2018. Specifically, for each year, we note the month when the transfer notification was released, when the transfer orders announcement was made and the date by which the new position would need to be taken up.

Table 12. Summary statistics for Uttar Pradesh case-level analysis

	Obs.	Mean	Std. Dev.	Min.	Max.
Prob. case decided by end-2021	881,295	0.80	0.40	0	1
Prob. case decided within 1 year of filing	824,687	0.52	0.50	0	1
Prob. case decided within 2 years of filing	824,687	0.63	0.48	0	1
Prob. case decided within 3 years of filing	824,687	0.69	0.46	0	1
Prob. case experienced a vacancy	881,295	0.18	0.38	0	1
Number of vacant spells	824,687	0.17	0.55	0	13
Number of vacant days	824,687	44.83	222.96	0	6901
Number of hearings	576,428	9.31	15.69	1	809
Number of transfers	817,052	3.47	4.62	1	170
Number of promotion transfers	824,687	0.18	0.52	0	17
Number of retirement transfers	824,687	0.13	0.47	0	13
Number of other transfers	817,052	2.03	4.05	-1	82
Number of transfers within 1 year of filing	817,052	0.45	1.32	0	44
Number of transfers within 2 years of filing	817,052	0.82	2.29	0	70
Number of transfers within 3 years of filing	817,052	1.12	3.05	0	85
Number of promotion transfers within 1 year of filing	824,687	0.02	0.17	0	5
Number of promotion transfers within 2 years of filing	824,687	0.04	0.22	0	5
Number of promotion transfers within 3 years of filing	824,687	0.05	0.26	0	6
Number of retirement transfers within 1 year of filing	824,687	0.03	0.21	0	7
Number of retirement transfers within 2 years of filing	824,687	0.05	0.29	0	8
Number of retirement transfers within 3 years of filing	824,687	0.06	0.33	0	9
Number of scheduled transfers	817,052	1.15	1.59	0	38
Number of nonscheduled transfers	817,052	2.33	3.36	0	138
Number of sections	881,295	0.78	0.73	0	28
Number of sections missing	881,295	0.31	0.46	0	1
Civil cases	881,295	0.11	0.31	0	1
Criminal cases	881,295	0.53	0.50	0	1
Bail cases	881,295	0.11	0.31	0	1
Other cases	881,295	0.25	0.43	0	1
Cases in Family Courts	881,295	0.07	0.26	0	1
Cases in Civil Judge Junior Division Courts	881,295	0.11	0.32	0	1
Cases in Civil Judge Senior Division Courts	881,295	0.08	0.27	0	1
Cases in Chief Judicial Magistrate Courts	881,295	0.44	0.50	0	1
Cases in District and Sessions Courts	881,295	0.21	0.41	0	1

Notes: The data include one observation for each case filed in Uttar Pradesh's lower courts in 2010–2018.

Table 13. Transfers reduce the chances of a case being decided, particularly in the early years

Case decided (0/1) and Number of transfers measured:	1 year since filing	2 years since filing	3 years since filing
	1	2	3
Panel A:			
Number of transfers	-0.0461***	-0.0424***	-0.0399***
	(0.00173)	(0.00138)	(0.00121)
Observations	817027	817027	817027
Adjusted R-squared	0.37	0.35	0.34
Panel B:			
Number of retirement transfers	-0.0539***	-0.0486***	-0.0428***
	(0.00448)	(0.00664)	(0.00672)
Number of collateral transfers	-0.0402***	-0.0392***	-0.0350***
	(0.00259)	(0.00233)	(0.00235)
Number of other transfers	-0.0486***	-0.0436***	-0.0422***
	(0.00218)	(0.00206)	(0.00212)
Observations	817027	817027	817027
Adjusted R-squared	0.37	0.35	0.34
Dependent variable mean	0.52	0.63	0.69
Case-specific controls	√	√	√
Case type X courtroom fixed effects	\checkmark	\checkmark	\checkmark
Filing month-year fixed effects	\checkmark	\checkmark	\checkmark

Notes: The dependent variable is an indicator for whether a case was decided; the independent variable is transfers. Case-specific controls are a count of the number of sections of the law a case is filed under (a measure of case complexity), and a dummy for whether these data are missing. Standard errors are clustered by case type X courtroom. * p < 0.10, ** p < 0.05, *** p < 0.01. See text for details.

Table 14. Robustness tests: Transfers reduce the chances of a case being decided

Transfers specified as:	Count 1	Dummy 2	Log 3	Winsorized 4
Panel A:				
Number of transfers	-0.0507***	-0.358***	-0.335***	-0.0947***
	(0.00269)	(0.00859)	(0.00453)	(0.00213)
Observations	817027	817027	817027	817027
Adjusted R-squared	0.45	0.36	0.55	0.56
Panel B:				
Number of retirement transfers	-0.0452***	-0.0156	-0.0947***	-0.0962***
	(0.00560)	(0.0230)	(0.0129)	(0.00805)
Number of collateral transfers	-0.0102***	-0.0294**	-0.0967***	-0.0815***
	(0.00266)	(0.0132)	(0.00862)	(0.00601)
Number of other transfers	-0.0578***	-0.306***	-0.332***	-0.0986***
	(0.00282)	(0.0168)	(0.00570)	(0.00232)
Observations	817027	817027	760079	817027
Adjusted R-squared	0.46	0.34	0.56	0.56
Mean dependent variable	0.78	0.78	0.77	0.78

Notes: The dependent variable is an indicator for whether a case was decided; the independent variable is transfers, specified as a count (column 1; this is the same specification as in Table 3), a dummy variable (column 2), logged (column 3) and winsorized (column 4). Case-specific controls are a count of the number of sections of the law a case is filed under (a measure of case complexity), and a dummy for whether these data are missing. Standard errors are clustered by case type X courtroom. * p < 0.10, *** p < 0.05, **** p < 0.01. See text for details.

Table 15. Transfers increase the chances that cases will be decided as uncontested

	Case uncontested (0/1)			
	1	2	3	4
Panel A:				
Number of transfers	0.0101**	0.00661	0.0235***	0.0249***
	(0.00507)	(0.00529)	(0.00329)	(0.00250)
Observations	640994	640994	640984	640966
Adjusted R-squared	0.00	0.07	0.14	0.16
Panel B:				
Number of retirement transfers	-0.0948***	-0.0631***	-0.0198	-0.00775
	(0.0271)	(0.0181)	(0.0261)	(0.0153)
Number of collateral transfers	-0.0489***	-0.0441***	-0.0197***	-0.0163***
	(0.0112)	(0.00874)	(0.00721)	(0.00525)
Number of other transfers	0.0229***	0.0171***	0.0311***	0.0318***
	(0.00327)	(0.00264)	(0.00318)	(0.00277)
Observations	640994	640994	640984	640966
Adjusted R-squared	0.02	0.08	0.15	0.17
Dependent variable mean	0.45	0.45	0.45	0.45
Case-specific controls		√	√	√
Case type fixed effects		\checkmark	\checkmark	
Courtroom fixed effects			\checkmark	
Case type X courtroom fixed effects				\checkmark
Filing month-year fixed effects			\checkmark	\checkmark

Notes: The dependent variable is an indicator for whether a decided case was uncontested; the independent variable is the number of transfers. Case-specific controls are a count of the number of sections of the law a case is filed under (a measure of case complexity), and a dummy for whether these data are missing. Standard errors clustered by courtroom for regressions in columns 1–3; standard errors are clustered by case type X courtroom for the regressions in column 4. * p < 0.10, *** p < 0.05, **** p < 0.01. See text for details.

Table 16. Robustness test: Transfers increase the time to decision for decided cases

	Time to decision (years)			
	1	2	3	4
Panel A:				
Number of transfers	0.428***	0.387***	0.322***	0.323***
	(0.0379)	(0.0349)	(0.0248)	(0.0165)
Observations	640155	640155	640145	640127
Adjusted R-squared	0.30	0.44	0.77	0.77
Panel B:				
Number of retirement transfers	0.352***	0.366***	0.334***	0.338***
	(0.115)	(0.0849)	(0.0495)	(0.0310)
Number of collateral transfers	0.251***	0.252***	0.220***	0.216***
	(0.0760)	(0.0610)	(0.0326)	(0.0241)
Number of other transfers	0.456***	0.407***	0.336***	0.337***
	(0.0266)	(0.0266)	(0.0220)	(0.0150)
Observations	640155	640155	640145	640127
Adjusted R-squared	0.30	0.44	0.77	0.77
Dependent variable mean	1.11	1.11	1.11	1.11
Case-specific controls		√	√	√
Case type fixed effects		\checkmark	\checkmark	
Courtroom fixed effects			\checkmark	
Case type X courtroom fixed effects				\checkmark
Filing month-year fixed effects			✓	√

Notes: The dependent variable is the years to decision; the independent variable is the number of transfers. Case-specific controls are a count of the number of sections of the law a case is filed under (a measure of case complexity), and a dummy for whether these data are missing. Standard errors clustered by courtroom for regressions in columns 1–3; standard errors are clustered by case type X courtroom for the regressions in column 4. * p < 0.10, *** p < 0.05, **** p < 0.01. See text for details.