

# **University of Portsmouth**

From the SelectedWorks of Shubhankar Dam

October, 2021

# Institutional Corruption in the Supreme Court of India.pdf

Shubhankar Dam Madhav S. Aney, *Singapore Management University* Giovanni Ko, *Nanyang Technological University, Singapore* 



Available at: https://works.bepress.com/shubhankar\_dam/56/

# Jobs for Justice(s): Corruption in the Supreme Court of India

Madhav S. Aney<sup>\*1</sup>, Shubhankar Dam<sup>2</sup>, and Giovanni Ko<sup>3</sup>

<sup>1</sup>School of Economics, Singapore Management University
 <sup>2</sup>Columbia Law School and School of Law, University of Portsmouth
 <sup>3</sup>School of Economics, Singapore Management University

November 17, 2020

#### Abstract

We investigate whether judges respond to pandering incentives by ruling in favour of the government in the hope of receiving jobs after retiring from the Court. We construct a dataset of all reported Supreme Court of India cases involving the government from 1999 till 2014, with an indicator for whether the decision was in its favour or not. We find that pandering incentives have a causal effect on judicial decision-making, where we define pandering incentives as being jointly determined by 1) the importance of the case (exogenously determined by a system of random allocation of cases) and 2) whether the judge retires with enough time left in a government's term to be rewarded with a prestigious job (since the date of retirement is exogenously determined by law to be their 65th birthday). We also find that authoring judgements in favour of the government is positively associated with the likelihood of being appointed to a prestigious post-Supreme Court job. These findings suggest the presence of corruption in the form of government influence over judicial decisions that seriously undermines judicial independence.  $^{\dagger}$ 

*Keywords*: judicial decision-making, corruption, separation of powers, career concerns, public sector incentives, supreme court, India, judiciary

JEL codes: D73, H11, K40

<sup>\*</sup>Corresponding author. madhavsa@smu.edu.sg

<sup>&</sup>lt;sup>†</sup>We thank Konrad Burchardi, Parkash Chander, Davin Chor, Dhammika Dharmapala, Steven Durlauf, Alexander Christoph Fischer, Tom Ginsburg, William H.J. Hubbard, Brian P. Kennedy, Nuarpear Lekfuangfu, Lin Feng, Vikramaditya Khanna, Lawrence Lessig, Anirban Mitra, Omer Moav, Abhiroop Mukhopadhyay, Mark Ramseyer, Yona Rubinstein, Tom Sargent, Shekhar Shah, Prakarsh Singh, Sujata Visaria, Yasutora Watanabe and seminar participants at Singapore Management University, City University of Hong Kong, Hong Kong University of Science and Technology, London School of Economics, National University of Singapore, IDC Herzliya, Bar-Ilan University, National Council of Applied Economic Research, Delhi School of Economics, Australasian Public Choice Conference, ISI Annual Conference on Growth and Development, Colloquium on the Supreme Court of India organised by Jindal Global Law School, ISI Delhi, American Law and Economics Association Conference, Empirical Enquiries into the Indian Judicial System at the University of Chicago Center in Delhi, Asia Law and Economics Association Conference, SMU ECON204 students from 2017 and 2018 cohorts, and one anonymous referee for valuable comments and suggestions. We also thank our project manager Dominic Liew and research assistants Alwyn Loy, Chong Shou Yu, Charlene Chow, Glenda Lim, Kartik Singh, Nicole Chan, Nicole Ann Lim, Persis Hoo, Shirlene Leong and Teo Ting Wei. The views expressed here are solely those of the authors.

# 1 Introduction

The fact that many public servants have careers after their tenure in public service has long been thought to create conflicts of interest.<sup>1</sup> In response to this concern, many countries constrain former public servants by requiring a cooling-off period after retirement before they seek fresh employment. However, such constraints rarely apply to retired judges.<sup>2</sup> In countries with term limits for judges, it is common for retired judges to go on to have careers in the public and private sectors. This practice raises the possibility that the prospect of post-retirement appointments influences judicial decision-making. If true, this compromises the idea of a fair and independent judiciary,<sup>3</sup> In this paper, we investigate the practice of awarding government jobs to retired judges, and show that the concerns surrounding it are in fact valid.

We examine this practice in the context of India. Over the last two decades, it has become common for retiring Supreme Court Justices in India to be appointed to prestigious government positions. This has been criticised as leading to a bias in favour of the government when judges decide cases with high stakes that are important to the government.<sup>4</sup> In this context, critics allege that corruption takes the form of the following quid-pro-quo: judges *pander* to the government by ruling in its favour and in exchange, the government *rewards* judges who have done so with jobs. This raises two natural questions that we confront in this paper. First, do judges actually respond to pandering incentives by ruling in favour of the government? Second, does the government actually reward judges who ruled in its favour with prestigious jobs? In this paper, we answer both these questions in the affirmative.

To do so, we constructed a novel dataset of cases decided by the Supreme Court of India between 1999 and 2014 involving the government. We analysed the full text of the judgements and coded whether the government won or lost the case. We also collected data on the post-Supreme Court appointments and we find that getting one is positively correlated with decisions in favour of the government.

The key identification challenge is that this correlation between favourable judicial decisions and government appointments after retirement may be driven simply by characteristics of judges such as, for example, their suitability for particular appointments or their ideology, rather than by manipulation of judicial decisions to secure such appointments. As such, judi-

<sup>&</sup>lt;sup>1</sup>There is an emerging empirical literature that suggests that individuals with government experience derive substantial value as lobbyists from their connections to serving politicians. See for example Bertrand, Bombardini, and Trebbi (2014) and Vidal, Draca, and Fons-Rosen (2012). It is therefore plausible that the prospect of such lobbying roles affects their behaviour when they serve in government. See Dal Bó (2006) for a review of the literature on revolving doors and regulatory capture.

 $<sup>^{2}</sup>$ See chapter 3 of Garupa and Ginsburg (2015) for an extensive discussion of the practice of awarding jobs to judges across different countries.

<sup>&</sup>lt;sup>3</sup>Judicial independence is typically defined as independence from the parties to the dispute, that is, the judge does not expect his welfare to be affected by whether he decides in favour of one party or the other. More specifically it is also seen as independence from government influence when it comes to judicial decision-making. See Ramseyer (1998) for a discussion of the idea of judicial independence and a survey of the literature.

<sup>&</sup>lt;sup>4</sup>We present some of the public discourse surrounding this issue in section 7.

cial decision-making may be invariant to incentives and may merely reveal a judge's "type" rather than indicate the presence of corruption. To address this concern we focus on judicial behaviour and attempt to isolate the causal effect of pandering incentives on judicial decision-making.

In our framework, the exposure of a judge to *pandering incentives* in a case is jointly determined by 1) whether the case is important and 2) whether the judge retires with enough time (at least 47 weeks) left in a government's term to be rewarded with a prestigious job. The institutional architecture of the Supreme Court of India has two unique features that ensure that these pandering incentives are plausibly exogenous. First, importance, i.e., whether the case is of special importance to the government, is plausibly exogenous because cases are randomly assigned to judges. Second, the time between the retirement of a judge and the date of the next election is exogenous in our sample for two reasons: judges must retire on their 65th birthday; all governments served their full terms and elections were regularly held at 5-year intervals.

We can think of benches with judges retiring long before an election as "treatment" benches and those with judges retiring shortly before an election as "control" benches. Our identification strategy relies on the assumption that, although there could be differences between important and non-important cases due to factors other than pandering incentives, these differences do not vary between treatment and control benches. Using this methodology, we find that judges who have *pandering incentives* are more likely to rule in favour of the government. We interpret this result as the causal effect of pandering incentives on judicial behaviour.

Furthermore, we attempt to characterise the channel through which pandering incentives work and find that the mechanism consists of actually being the author of judgements rather than simply being on a bench that decides the case in favour of the government. On the "rewards" side, we show that authoring decisions in important cases in favour of the government is positively correlated with whether or not the judge is appointed to prestigious post-Supreme Court jobs. This correlation remains robust to instrumenting favourable decisions authored in important cases with the number of important cases decided by the judge. Similar to the results on the nexus between bureaucrats and politicians in India presented in Iyer and Mani (2012), these results suggest that pandering to the government may be a path to a post-retirement appointment.

A large literature analyses the question of judicial independence. In the context of the US, Ashenfelter, Eisenberg, and Schwab (1995) find that there is no effect of the ideology of the president who appoints a judge on judicial decisions in federal trial courts. Ramseyer and Rasmusen (1997) present evidence suggesting that in Japan, where judges are appointed to the national judiciary and not to specific courts, deciding against the ruling party leads to worse assignments when judges are transferred. In Argentina, Iaryczower, Spiller, and Tommasi (2002) find that judges do decide against the government, and the likelihood of doing so is higher when the government is unlikely to survive. Helmke (2002) also finds

similar results that suggest there is a strategic dimension to judicial decision-making. Black and Owens (2016) show that US circuit judges, who have a good chance of being appointed to the US Supreme Court, are more likely to decide in line with the president's ideology when a vacancy arises on the Supreme Court. Similar results are documented in Epstein, Landes, and Posner (2013). On the other hand Salzberger and Fenn (1999) find that in the UK, reversing favourable lower court decisions does not harm the chances of promotion to the House of Lords from the Court of Appeal. Our paper adds to this literature by using the combination of random allocation of cases and fixed retirement dates to rule out ideologybased explanations of judicial behaviour and isolate the causal effect of incentives on judicial decisions.

Our paper also contributes to the growing empirical literature on legal realism that examines how judicial decisions are affected by factors unrelated to legal reasoning. Lim, Snyder, and Strömberg (2015) show that sentence lengths are increased significantly by newspaper coverage of the case. Chen, Moskowitz, and Shue (2016) document a negative autocorrelation in refugee asylum court cases unrelated to their merits, suggesting that the gambler's fallacy is at work – judges underestimate the likelihood of sequential streaks occurring by chance. Boyd, Epstein, and Martin (2010) document the existence of systematic differences in decisions of male and female judges. Eren and Mocan (2018) find that unexpected losses by a prominent college team increases sentence lengths of juvenile offenders in cases handled in the week following the loss especially if the judge received his bachelor's degree from that college. In a similar vein Shayo and Zussman (2011) document the presence of judicial bias in Israel in favour of defendants who have the same ethnicity as them and Abrams, Bertrand, and Mullainathan (2011) show the presence of judicial bias against African-American defendants in the US. Geerling et al. (2018) document the effect of political ideology on judicial decisions in Nazi Germany. Our paper adds economic incentives in the form of career concerns to the list of the factors that may affect judicial decisions. In attempting to understand how career concerns affect outcomes in the public sector, our paper complements the empirical literature on career concerns which focuses mostly on incentives within the firm, such as executive  $compensation.^{5}$ 

Finally, our paper is related to the empirical literature on identifying and measuring corruption at an aggregate institutional level.<sup>6</sup> More specifically, our paper is related to the literature on corruption that seeks to understand the determinants of corruption and what can be done about it.<sup>7</sup> In particular, our paper supports a view of corruption as a phenomenon

<sup>&</sup>lt;sup>5</sup>Notable exceptions are Schneider (2005) and Li and Zhou (2005). For an insightful discussion of incentive reforms in the public sector, see Mookherjee (1997). For theoretical work on the effect of career concerns of judges and lawyers on litigation see Levy (2005) and Ferrer (2015).

<sup>&</sup>lt;sup>6</sup>Surveys include Banerjee, Hanna, and Mullainathan (2012), Pande (2007), and Sukhtankar and Vaishnav (2015). See Lessig (2013a) and Lessig (2013b) for a discussion of the idea of institutional corruption in law.

<sup>&</sup>lt;sup>7</sup>See Callen and Long (2015), Ferraz and Finan (2008), Ferraz and Finan (2011), Niehaus and Sukhtankar (2013) and Bobonis, Fuertes, and Schwabe (2016) for more examples of settings where corruption is identified as arising from specific incentives. See Fisman and Miguel (2007) for an example of how both social norms and incentives in the form of legal enforcement may shape corruption, and Olken (2007) for the effectiveness of government audits

arising from and shaped by particular incentives that could potentially be eliminated by concrete measures (such as mechanical rules for the allocation of post-retirement jobs) rather than more general institutional failures which may not have obvious solutions. As highlighted in a survey by Olken and Pande (2012), this literature reinforces the centrality of incentives in shaping corruption.

It is important to note that the incentives that shape judicial behaviour in our setting are not necessarily financial in nature: the attraction of these jobs may be largely due to the influence the holders continue to wield on policy matters, rather than just the salary and perks associated with these jobs.<sup>8</sup> This is different from the type of corruption that arises from bribes from the private sector, documented for example in Fisman, Schulz, and Vig (2014) who show that political candidates that win elections in India show an increase in asset growth relative to the runners-up. Instead the type of corruption we analyse differs from this in two ways: a) the reward is mainly in the form of power and influence rather than financial; b) it arises from one part of the government trying to influence the other, namely, the executive trying to influence judicial decision-making, rather than a private party.

Our paper is of interest for three reasons. First, our paper identifies the causal effect of career-concern incentives on judicial decision-making. Second, we identify the presence of corruption in a very high-profile institution subject to intense public scrutiny, where one would expect it to be subtle and hard to detect. Finally, the pandering we uncover is systemic in nature and shaped by incentives, suggesting a clear role for institutional reform in addressing the problem.

The rest of the paper is organised as follows. We describe the institutional background of the Supreme Court of India in section 2, the data in section 3 and the empirical strategy in section 4. In section 5, we present our main results about the presence of pandering, together with robustness checks. In section 6, we examine how pandering manifests itself through writing favourable judgements rather than simply being on a bench that decides in favour of the government. In section 7, we present evidence that the government rewards pandering with post-Supreme Court jobs. We provide concluding remarks in section 8.

# 2 Institutional background

The Supreme Court of India is the apex court for the largest common law judicial system in the world (Chandra, Hubbard, and Kalantry 2017). It decides both appeals from lower courts and fresh petitions. Compared to supreme courts in other countries, it has a very high case load. This makes the Supreme Court of India an outlier when compared to Supreme

and grassroots participation on corruption in road projects in Indonesia.

<sup>&</sup>lt;sup>8</sup>We follow the Bardhan (1997) definition of corruption as the use of public office for private gain rather than the narrower definition in Shleifer and Vishny (1993) of corruption as the sale of government property for personal gain. Moreover, the term corruption used in this article should not be read as meeting the *legal* standards prescribed in the Prevention of Corruption Act, 1988, India. Instead, it is intended to be understood in the way it is ordinarily used in the English language.

Courts of other countries, when it comes to access and the number of decisions (Green and Yoon 2016).

In response to perceived inaction by the executive and the legislature, the Supreme Court has expanded its remit to matters traditionally within the purview of those branches of government. It routinely strikes down actions by government agencies at all levels and issues orders on policy matters as diverse as pollution, sexual harassment, etc. As noted by Robinson (2013), "despite the range of matters, or perhaps partly because of this diverse and heavy workload, the Indian Supreme Court has become well known for both its interventionism and creativity." Unlike the US Supreme Court, which is chiefly concerned with norm elaboration, Chandra, Hubbard, and Kalantry (2017) show that the Indian Supreme Court also emphasises the goal of correcting errors case-by-case and thus regularly overturns lower court decisions. As such, the court is relatively unconstrained in how it decides cases. This discretion potentially creates an opening for other factors, such as pandering incentives, to play a role in decision-making.

Since 2008, the Constitution of India provides for up to 31 Supreme Court Justices.<sup>9</sup> Between 1986 and 2008, the number was limited to 26. However, the actual number of judges has always been less than 31, with the number in September 2018 being 25. The Chief Justice of India (henceforth CJI) is the most senior Justice of the Court with additional powers in the allocation of exceptional cases, as discussed below.

#### 2.1 Allocation of cases

In the Supreme Court of India, a *bench* is a group of judges who jointly hear and decide a case. Benches are always composed of at least two judges (except during court vacations when single judges may hear urgent matters for temporary relief). Ordinarily, a case is heard by a two-judge bench, but in the uncommon occasions when the two judges disagree or the case is of exceptional importance, the CJI constitutes a larger bench of three or more judges to hear that particular case.

Before 1994, the allocation of cases to benches was at the discretion of the Registry of the Supreme Court. There was widespread suspicion that this discretion led to "bench hunting", direct collusion between lawyers and the Registry to manipulate the allocation of cases to more favourable benches.

In response to this problem, the Supreme Court switched to a system of random computerised allocation of cases to benches. Based on the prior work experience of the judges, they are assigned subject matter specialisations by the CJI. When a case is filed, it is tagged with a specialisation, and then assigned to one of the benches composed of judges who have that specialisation. The mapping between specialisations and benches is many-to-many so that each bench has several specialisations but more importantly each specialisation has several benches. The latter feature allows the random allocation of cases to benches.

<sup>&</sup>lt;sup>9</sup>See Robinson (2013) and Chandra, Hubbard, and Kalantry (2017) for an insightful exposition of the institutional background of the Supreme Court of India.

The Handbook of the Supreme Court emphasises that the allocation of cases to benches by the current system is manipulation-proof, stating that

Since the allocation is made by computer, [...] there is no scope for any Bench-Hunting. (Section VI.A.i)

This new practice was confirmed by a former Registrar General of the Supreme Court who was in service when the new system was introduced. In private correspondence with the authors he described the new system as follows:

Computerized system of filing and processing with random system of allocation of petitions to different benches was done with that end that is to save on manual labour, bring more speed and efficiency. [...] At the same time it also eliminated the possibility of "forum shopping" or in other words "bench hunting" by lawyers.

Since benches composed of three or more judges are constituted by the Chief Justice to hear particular cases, the composition of the benches in these cases is endogenous to case characteristics and we drop such cases from our analysis. Therefore, our sample is composed solely of cases decided by two-judge benches.<sup>10</sup>

## 2.2 Appointment and retirement of judges

Since the mid-1990s, in response to calls for increased judicial independence, the appointment of judges to the Supreme Court has been the exclusive prerogative of the Supreme Court itself.<sup>11</sup> The CJI, heading a panel composed of other Supreme Court Justices, appoints new Justices from a pool of (state-level) High Court judges and, occasionally, eminent Supreme Court lawyers. Therefore, unlike courts such as the US Supreme Court, the executive and legislative branches of government play no active role in the appointment process. The appointment of the CJI is mechanical by convention: at any given time, he is the judge with the longest tenure in the Supreme Court.<sup>12</sup>

According to Article 124 of the Indian constitution, Supreme Court Justices must retire from the Court on their 65th birthday. Hence, their retirement date is exogenously determined by their date of birth.<sup>13</sup>

<sup>&</sup>lt;sup>10</sup>One potential concern is that cases decided during our sample period were actually allocated to benches before the randomisation system was introduced in 1996. This is not a concern for our sample since, in every case, at least one judge was appointed after 1996, so that the bench must have been constituted after the change.

<sup>&</sup>lt;sup>11</sup>This change was enacted by the Supreme Court itself in its decision on the Supreme Court Advocates-on Record Association vs Union of India case of 1993. In 2015 the government amended the Indian Constitution to wrest some of the power of judicial appointment from the Supreme Court. However, in a case where this constitutional amendment was challenged, the Supreme Court struck it down as being unconstitutional. As a result the court continues to control the appointment of judges.

<sup>&</sup>lt;sup>12</sup>Since the Supreme Court Advocates-on Record Association vs Union of India case of 1993, there has been no deviation from this convention. Note that although there have been female Supreme Court Justices, we use masculine pronouns throughout when referring to judges since the court has been overwhelmingly composed of men.

<sup>&</sup>lt;sup>13</sup>In principle, judges could choose to retire earlier than this, but this only happened for one judge in our sample period. We discuss our treatment of this case in section 3.

After retiring from the Supreme Court, judges are constitutionally barred from practising law in any Indian court. Many continue to work as arbitrators in private disputes or as members of government commissions. The Union government of India (henceforth government) is the largest employer of ex-Supreme Court judges. Appointments to government positions are considered prestigious and desirable by judges, as these enable them to continue influencing policy. These appointments are made by the executive and are consequently politically driven. This appointment process is not transparent and is widely believed to be subject to lobbying by judges and internal machinations within the government.<sup>14</sup>

Hence, although the government has no active role in appointing judges to the Supreme Court, it wields substantial influence over them by controlling their post-Supreme Court job prospects, as we demonstrate in later sections. This is in contrast to the US, where the appointment process to the Supreme Court is heavily politicised but the government wields little influence over judges once their appointment is finalised. The two systems differ in how the government tries to influence the Supreme Court: in the US, it does so by manipulating the *type* of judges who are appointed to the Court; in India, it does so by incentivising judges to manipulate their *actions* through control of post-retirement job prospects.

# 3 Data

In this section, we describe the sources and features of the data we use in this paper. We use three kinds of data: information about cases decided by the Supreme Court, information about judges' tenures in the Court and information on the jobs they received after retirement from the Court.

## 3.1 Case data

The Supreme Court of India has a very high case load. In the 15 years between 1999 and 2014, the court delivered approximately 22,500 decisions that were reported.<sup>15</sup> In this section, we describe the restrictions we place on *reported* cases for generating our sample.

Using the SCC Online database, we collected the decisions of the Supreme Court between 1999 and 2014.<sup>16</sup> We use this time period since the governments elected between 1999–2014 have served out their full terms and elections have occured every five years in this period,

<sup>&</sup>lt;sup>14</sup>See for example the views of a former CJI. Indian Express, 25 Oct 2015, As CJI, I told PMs of way to insulate judges from lure of post-retirement jobs: Lodha

<sup>&</sup>lt;sup>15</sup>In our sample period 114,448 cases were admitted for full hearing. See Indian Judiciary Annual Report 2015-16 pp 54-55. The number of reported decisions is lower than this since each decision may resolve multiple cases admitted for full hearing. This is because cases involving similar facts and legal questions are often clubbed together and heard by the same bench, and resolved within one decision. The rest of the paper uses the word "case" to collectively refer to all cases that are clubbed together in a decision. Additionally, not all decisions are reported by SCC Online, such as those involving short orders or insignificant discussions of the law.

<sup>&</sup>lt;sup>16</sup>SCC Online is widely acknowledged to be the most comprehensive database of Supreme Court of India cases, used by lawyers and legal scholars.

and this will be a key part of our identification strategy.<sup>17</sup>

Our sample is composed of all cases that satisfy the following criteria:

- In the SCC Online database, we search for decisions where the phrase "Union of India" appears as a party. This leaves us with the full text of 2,605 cases involving the government out of the approximately 22,500 reported cases in the Supreme Court, constituting about 11% of reported cases.
- Such decisions come in two forms: orders and judgements. Orders, almost always are short, interim and procedural in nature. They are used, for example, to set dates of hearing, summon documents, etc. Judgements, on the other hand, contain the final decision of the court in that case. Also, the name of the judge writing a judgement is always explicitly identified but this is almost never the case for orders. Hence, in most cases, it is not possible for the government to pinpoint the judge who wrote a favourable order. This also presents the empirical problem of identifying an order with the judge who authors it. We therefore restrict our attention to judgements. This leaves us with 941 cases that resulted in judgements.
- As discussed in section 2.1, we only consider cases decided by a two-judge bench since only these cases are randomly assigned to benches. This reduces the sample to 742 cases.
- We only consider cases where both judges retire before March 2015, the beginning of data collection.<sup>18</sup> This leaves us with 687 cases.
- We restrict our sample to cases where only one of the two judges wrote a judgement (although our results remain unchanged to varying this criterion since there are only 6 cases with 2 judgements). This leaves us with 681 cases.
- Lastly, we only include cases where the decision was unambiguously for or against the government, as described below (we test for robustness of our results to varying this criterion). This leaves us with a sample of 652 cases.

This sample of 652 cases amounts to just over 25% of the 2605 reported cases involving the Union of India.

For each case, we wrote a computer program to parse the full text of the judgement to extract information on the date of the judgement, word count of the judgement, whether the case was an appeal or a fresh petition, whether the government was an appellant/petitioner or respondent, the names of judges deciding the case, the name of the judge who wrote the judgement, whether the CJI was one of the judges, and whether the Attorney General of India, the Solicitor General of India, or an Additional Solicitor general of India represented

<sup>&</sup>lt;sup>17</sup>There were 3 elections between 1996 (when the randomisation of case allocation was introduced) and the start of our sample in 1999 with none of the governments serving their full term.

 $<sup>^{18}</sup>$ We could in principle include cases decided by judges who haven't retired by this date since their retirement dates are known. However, we drop these cases for consistency with our sample of retired judges in section 7. Nonetheless, the inclusion of these cases does not affect the results as we show in table 23 in appendix B.

	Mean	SD	Min	Max	Factor loading
UOI won	0.586	0.493	0.000	1.000	
Number who retired long before	1.454	0.644	0.000	2.000	
Number of Attorneys General	0.025	0.155	0.000	1.000	0.0897
Number of Solicitors General	0.041	0.199	0.000	1.000	0.0358
Number of Senior Advocates	1.420	1.913	0.000	22.000	0.7046
Number of Advocates	11.933	15.65	0.000	186.000	0.7030
Importance	0.006	1.033	-0.848	12.502	
Appeal $(1)$ Petition $(0)$	0.842	0.365	0.000	1.000	
UOI appellant/petitioner (1) Respondent (0)	0.405	0.491	0.000	1.000	
CJI present in case	0.018	0.135	0.000	1.000	
Senior judge's remaining tenure	1.561	1.096	0.000	5.310	
Junior judge's remaining tenure	3.935	1.654	0.181	9.258	
Years from decision to election	2.360	1.353	0.003	5.036	
Observations	652				

Table 1: Case summary statistics

The factor loading column displays the factor loadings of the four measures of importance for the first principal component. The eigenvalue of the first principal component is 1.73. The first principle component explains 43% of the variation in the four measures importance.

the government in the case. We also extracted information on the number of Senior Advocates and the number of lawyers that appeared in the case.

Finally, a key case-level variable is whether the government won or lost. We hired secondand third-year law students as research assistants (RAs). Their task was to read the full text of each judgement and input whether the government won or lost. Data entry was carried out through an online platform we designed.<sup>19</sup> The interface allowed for three options, namely, the government won, the government lost or the winner was not unambiguously identifiable. Each case was initially randomly assigned to two RAs. If the two RAs disagreed in their coding, the case was randomly assigned to a third RA.<sup>20</sup> This happened in fewer than 10% of the cases. The interface also allowed RAs to rate their confidence (high/low) in their own coding of each case. This was consistently high except for those cases with disagreements. The summary statistics for these case level variables are reported in table 1.

#### 3.2 Judge data

For each Justice of the Supreme Court, we collected information on their date of birth, date of appointment to the Supreme Court, date of retirement from the Court and date of elevation to the office of Chief Justice, if ever.

Using this information, we define the variable "*retired long before*" as a dummy that takes value 1 if the judge retired at least 47 weeks before the next general election, 0 otherwise.

<sup>&</sup>lt;sup>19</sup>Screenshots of the online platform and instructions to the RAs are available upon request.

 $<sup>^{20}</sup>$ Since there were three options, it is possible that disagreements persist even with three RAs, but this never occurred in our sample.

During our sample period 1999–2014, elections occurred at regular five-year intervals as all governments served their full term. Since, as discussed in section 2.2, the retirement date of judges in our sample is their 65th birthday, the "retired long before" variable is mechanically determined by their date of birth and the date of the next election after retirement. This approach is justified by the absence of voluntary retirement in our sample. The only exception to this is Justice Dalveer Bhandari, who retired on the day he was elected to the International Court of Justice, six months before his 65th birthday.<sup>21</sup> SC judgeships are the most prestigious judicial offices in the country and judges therefore desire to maximise their tenure on the SC. Voluntary retirement is therefore unobserved in our sample except for Dalveer Bhandari.

The tenures of all judges in our sample are depicted in fig. 2 in appendix A. The black bars represent the tenures of judges who retired long before an election, while the hatched ones represent the tenures of judges who retired shortly before an election. The vertical lines represent general election dates, with the blue lines representing elections won by the UPA (2004 and 2009) and saffron representing the NDA (1999 and 2014).

#### 3.3 Jobs data

We collected information on government positions taken up by Supreme Court Justices after their retirement from the Court. In particular, we collected information on the position and the date of appointment to that position. Whenever possible, we obtained this information from notifications published in the official Gazette of India. However, as the archives of the Gazette are incomplete, we supplemented this with an extensive search of newspaper reports and of the archives of bodies to which ex-Supreme Court Justices are commonly appointed. Since these are prominent positions, we are confident that our search was exhaustive.

We define a *post-Supreme Court (post-SC) job* as one awarded by the Union government to a retired Supreme Court Justice. Examples include Chairman or Member of the National Human Right Commission, Competition Appellate Tribunal, Law Commission of India and Press Council of India. We provide a full list in table 8 in appendix A. For a judge who is appointed to several post-SC jobs over time, we consider the first job as his post-SC job, since appointment to later jobs is likely to be affected by his performance in previous post-SC jobs as well as pandering while being an active judge.

We note that these jobs are necessarily post-retirement. In the Indian system, judges do not simultaneously hold other remunerated government positions. Governments may, in rare cases, announce these appointments while judges are in office. But appointments take effect only when judges resign or retire.

From time to time, the Supreme Court constitutes committees to investigate issues that arise in specific cases and appoints ex-SC judges to these committees. We exclude these

<sup>&</sup>lt;sup>21</sup>We code his "retirement date" as his 65th birthday to avoid the potential endogeneity of his actual date of retirement. In any case, we re-estimate our main results presented in table 3 excluding the cases decided by him and our results remain unchanged (see table 24 in appendix B). Another exception was Justice M. Srinivasan who died on 25 February 2000 before his 65th birthday but did not decide any cases in our sample.

	Mean	SD	Min	Max
Number of cases	19.53	18.88	1	130
Number of cases, UOI won, important (Median importance), author	2.944	3.801	0	23
Number of cases, UOI won, important (Median importance), non-author	2.778	2.183	0	10
Number of cases, UOI lost, important (Median importance)	4.208	4.145	0	20
Number of cases, important (Median importance, de-meaned)	0	8.392	-9.931	37.07
Number of cases, UOI won, important (AG or SG), author	0.486	0.949	0	4
Number of cases, UOI won, important (AG or SG), non-author	0.458	0.691	0	2
Number of cases, UOI lost, important (AG or SG)	0.306	0.642	0	3
Number of cases, important (AG or SG, de-meaned)	0	1.422	-1.250	5.750
Obtained a job from government in power at retirement	0.361	0.484	0	1
Tenure	5.078	1.604	3	9.929
Productivity	3.762	2.918	0.140	17.19
Number of cases relevant to post-SC jobs	17.79	16.65	1	109
Was CJI	0.153	0.362	0	1
Years from retirement until post-SC job	0.904	1.88	885	7.4
Retired long before an election	0.819	0.387	0	1
Observations	72			

#### Table 2: Judge summary statistics

The statistics for "Years from 65th birthday until post-SC job" are only computed for the judges who obtained a job from the government in power at the time they retired. The construction of productivity and the number of cases relevant to post-SC jobs is explained in section 7.1.

jobs since they are not awarded by the executive and are therefore unrelated to the type of corruption we investigate here. The summary statistics for judge level variables are reported in table 2.

# 4 Empirical strategy

We focus on corruption in the form of *pandering*, i.e., judges manipulating decisions in favour of the government in order to increase the likelihood of obtaining a post-SC job. At the case level, pandering occurs if the judges decide in favour of the government when, based on the merits of the case, the opposite decision should have been made.<sup>22</sup> Unfortunately, as any assessment of the merits of a case is inherently subjective, it is practically infeasible to use this approach to identify pandering in our sample of 652 cases. Instead, we can *statistically* identify the presence of pandering by comparing benches composed of judges who have stronger incentives to pander to those who have weaker incentives to pander.<sup>23</sup>

 $<sup>^{22}</sup>$ We use this dichotomous definition as we only observe whether the government has won or lost a case, without any information on how favourable the judgement was for the government.

 $<sup>^{23}</sup>$ In line with the empirical literature on corruption, we present *statistical* evidence of corruption, that is, we find that the existence of corruption is the most parsimonious and compelling explanation that fits the data at an aggregate level. Given the statistical nature of our study we make no claims about the presence of corruption in a particular case or by a particular judge. Therefore, our use of the term corruption should not be understood to refer an individual instance of corruption by a particular judge or to imply that all judges are corrupt.

At the judge level, we say that a judge has incentive to pander if he retires long before an election. Whether a judge retired long before an election or not is captured by whether the judge retired from the Supreme Court at least 47 weeks (0.904 years) before an election. We choose this threshold because, as seen in the summary statistics presented in table 2, it takes on average about 47 weeks to secure a post-SC job from the government, conditional on securing it at all.<sup>24</sup> Judges who retire less than 47 weeks before the next election have much weaker incentives to pander to the government in power at the time of their retirement, as they are unsure about whether that government will still be in power after the election. In section 7, we show that judges who retired at least 47 weeks before an election are indeed more likely to obtain a post-SC job from the government in power at the time of retirement.

To transform this variable into pandering incentives at the bench level, we simply construct two dummy variables that indicate whether the bench is composed of one or both judges retiring long before an election. The omitted category is composed of the benches in the "control group" with neither of the two judges retiring long before an election. In appendix D.3 we show that our results are robust to alternative specifications for this variable.

As described in section 2.2 and section 3.2, the date of retirement of judges is mechanically determined by their date of birth, and furthermore, elections occurred at regular five-year intervals. Hence, whether a judge is going to retire long before an election is predictable while he is deciding cases and, moreover, exogenous. Consequently the number of judges on the bench who retire long before an election is also exogenous. Using these two variable we regress

$$won_{ikt} = \alpha_0 + \delta_t + \lambda_1 \text{ one retired long before}_k + \lambda_2 \text{ both retired long before}_k + \mathbf{X}'_{ik}\eta + \varepsilon_{ikt}$$
(1)

The matrix  $\mathbf{X}_{ik}$  consists of case and bench characteristics, namely whether the case was an appeal or fresh petition, whether the government was the appellant/petitioner or respondent, and whether the CJI was one of the judges on the bench.  $\delta_t$  are year dummies. More importantly, we also include the time left in the tenures of the senior and junior judge on the bench and the time left in the tenure of the government in power. With these variables included as controls, we aim to show that the effect of pandering incentives holds after conditioning on (i) time the judges have left before retirement and (ii) time the government has left in power. This amounts to comparing trends in decision-making between judges who retire shortly and long before an election controlling for the timing of the case relative to an election and the length of tenures left of the judges.

Another more interesting possibility is that the effect of retirement-election distance varies with the importance of a case. To explore this, we treat pandering incentives as being jointly

 $<sup>^{24}</sup>$ The variable Years from retirement until post-SC job is positively skewed. See table 9 in appendix A.2 for the percentiles of the distribution of years from retirement to appointment. In table 18 in appendix B we assess the sensitivity of our results to changes in this threshold.

determined by

- 1. whether the judge retires long enough before an election, and
- 2. the importance of the case.

Our measure for the *importance* of a case is an index comprising the four following variables: the number of 1) Attorneys General, 2) Solicitors General, 3) Senior Advocates, and 4) Advocates that appeared in the case. The Attorney and Solicitor General are the primary and secondary lawyers of the government, respectively. Both appointments are political, with the Attorney General being a constitutional position equivalent in rank to a cabinet minister. As such, these lawyers only appear in cases of great importance to the government. Depending on the importance of a case, it is possible for more than one of the above to represent the government in the same case. These two variables therefore proxy for the value of winning the case for the government.

The number of Senior Advocates appearing in a case is our third proxy for its importance.<sup>25</sup> Senior Advocates are lawyers who specialise in appearing before the High Courts and the Supreme Court and "represent the scarcest and priciest legal talent in India" (Chandra, Hubbard, and Kalantry 2017). The government and other litigants often hire them in cases that are important enough to justify their high fees. Finally, we also proxy for importance using the number of advocates appearing in a case. This reveals the importance of the case for the litigants as it measures the amount of resources they are willing to spend on winning it. Hence, these two variable proxy for the sum of efforts exerted by litigants in a case, and are therefore indicative of the value the government places on winning the case.<sup>26</sup>

We compute the first principal component of these four variables, normalise it to have zero mean and unit standard deviation and use that as the index of importance.<sup>27</sup> The summary statistics for these four variables and their factor loadings in the index are presented in table 1. We expect that pandering, if it exists, will manifest itself in cases with high importance.

We regress

$$won_{ikt} = \alpha_0 + \sum_j \alpha_j b_{jk} + \delta_t + \beta \text{ importance}_i + \lambda_1 \text{ importance}_i \times \text{ one retired long before}_k + \lambda_2 \text{ importance}_i \times \text{ both retired long before}_k + \mathbf{X}'_{ik}\eta + \varepsilon_{ikt}$$
(2)

where  $won_{ik}$  is an indicator for whether the Union government won case *i* decided by bench *k*. The indicators  $b_{jk}$  capture whether judge *j* was part of bench *k*, so that  $\sum_{i} \alpha_{j} b_{jk}$  are essen-

 $^{27}$ We show the robustness of our results to using the proxies separately in table 15 in appendix B. These results are discussed in section 5.2.3. fig. 3 in appendix A shows the distribution for the index of importance.

 $<sup>^{25}</sup>$ Senior Advocate is the Indian designation that is equivalent to Senior Counsel in Commonwealth jurisdictions or Queen's Counsel in the UK.

 $<sup>^{26}</sup>$ In our data, we always observe the total number of advocates (senior and non-senior) for the government and all other litigants combined and we use this as our measure. The ideal measure would focus on the number of advocates appearing for the government only. In section 5.2.3 we restrict our sample to the cases where we do observe the senior and non-senior advocates appearing for the government only and show that our results remain robust with this measure.

tially judge dummies. There are two judge dummies that are active in every case since each case in our sample is decided by a bench composed of two judges.

The variables on the right-hand side of eq. (2) capture pandering incentives, while the dependent variable captures the behaviour induced by them. The key parameters of interest are  $\lambda_1$  and  $\lambda_2$ . Since our importance index is normalised to have mean zero and standard deviation one,  $\lambda_1$  measures the increase in the likelihood of an important case, i.e., a case that is one standard deviation above the mean, being decided in favour of the government when it is decided by a bench with one judge retiring long before rather than a bench with both judges retiring shortly before an election; similarly,  $\lambda_2$  measures the difference between benches with both judges retiring long before and both retiring shortly before an election. We interpret positive and significant estimates of  $\lambda_1$  and  $\lambda_2$  as evidence of the behavioural response to pandering incentives.

We identify pandering using two dimensions of variation; the importance of a case and whether judges retired long before an election. We can think of benches with two judges retiring long before an election as the "high treatment group", those with just one judge retiring long before an election as the "low treatment group" and those with both retiring shortly before an election as the "control group". We compare the important–non-important difference in decisions between the two treatment groups and the control group to obtain our estimates of the effect of pandering incentives. Our identifying assumption is that conditional on judge dummies, the time left to retirement for each judge on the bench, and the time left in the tenure of the government, the difference in the merits between important and nonimportant cases does not vary based on the composition of the bench deciding the cases, in particular, based on how many judges on the bench retire long before an election. This assumption is predicated on the practice of random allocation of cases to benches described in 2.1 and discussed further in appendix C.1.

Following from the discussion of the random assignment of cases in section 2.1, we know that assignment of cases to judges is random conditional on judge specialisation. Changes to the distribution of judge characteristics over time would be absorbed by  $\delta_t$ , the year effects. However, to fully account for this conditionality we should include judge dummies in our specification. In addition to absorbing any differences in specialisation, these would also absorb differences in judge ideologies and preferences. Unlike the specification in eq. (1), the one in eq. (2) allows us to include judge dummies. This is because in the specification in eq. (1), judge dummies cannot be estimated along with the effect of one and both judges retiring long before since these two variables are a sum of the two judge-specific dummies that indicate whether each judge retires long before the election. Consequently, both these variables are fully determined by the judge dummies.

# 5 Pandering incentives and judicial decisions

In this section, we present our main results about the presence of pandering. We also test them for robustness and address potential concerns about bias.

First, the results of estimating eq. (1) are reported in table 10 in appendix B. We observe that estimates of both  $\lambda_1$  and  $\lambda_2$  are close to 0 and statistically insignificant across all specifications. This suggests on average there is no effect of retirement-election distance on judicial decisions.

Next, the results from regressing our main specification (2) using OLS are reported in table 3. We cluster the standard errors at the judge dyad level to account for possible correlation of the error term across cases decided by the same judge.<sup>28</sup> We observe that the estimates of the key parameters  $\lambda_1$  and  $\lambda_2$  are positive, stable and significant in all specifications, indicating that judges do engage in corruption by favouring the government when the case is important *and* the judges retire long before an election.

To establish the presence of pandering, that is, to show that there is a causal effect of incentives on judicial decisions, we need to rule out the possibility that our results are driven by ideological alignment of judges with political parties. For example, judges who are ideologically aligned with the ruling party could be more likely to decide in favour of the government. Although undesirable, we do not consider this pandering. Instead, we define pandering as behaviour that arises in response to extrinsic incentives rather than intrinsic motivations such as ideology or innate characteristics. Ideological alignment or other unobservable time-invariant judge characteristics are unlikely to introduce bias in our regressions because they are unlikely to be correlated with our regressors. First, as discussed in section 2.1, the allocation of cases to judges is random, so that whether a judge is assigned an important case or not is uncorrelated with his personal characteristics. Second, whether a judge retires long before an election or not is decided solely by his date of birth and the date of the next election, both of which are exogenous.<sup>29</sup>

Nonetheless, to rule out the possibility of any bias caused by unobservable judge characteristics, we include judge dummies in eq. (2). These results are reported in columns (4)–(5). The estimates of the key parameters of interest  $\lambda_1$  and  $\lambda_2$ , continue to be positive and significant.

Furthermore, to control for time-specific effects, we also include dummies for the year in which the case was decided. These absorb any changes in the decisions induced by political and institutional changes over time, for e.g., the increase in the number of judges in 2008. In section 5.2.2 we show the robustness of our results to including other interactions to check whether our results are driven by, for example, changes in how judges decide important cases

 $<sup>^{28}</sup>$ To implement dyad-robust clustering proposed in Cameron and Miller (2014), we wrote a Stata program that is available upon request. This form of clustering subsumes both two-way clustering by judge and bench level clustering. We discuss this in appendix F.

<sup>&</sup>lt;sup>29</sup>The three elections that took place within our sample period occurred regularly once every five years: 2004, 2009, and 2014.

	(1)	(2)	(3)	(4)	(5)
Importance $\beta$	-0.285***	-0.294***	-0.375***	-0.278***	-0.287***
	(0.0516)	(0.0557)	(0.0651)	(0.0441)	(0.0450)
One retired long before	0.244***	0.248***	0.303***	0.237***	0.244***
× Importance $\lambda_1$	(0.0704)	(0.0801)	(0.0884)	(0.0671)	(0.0745)
		~ /			. ,
Both retired long before	$0.290^{***}$	$0.304^{***}$	$0.392^{***}$	$0.285^{***}$	$0.299^{***}$
× Importance $\lambda_2$	(0.0745)	(0.0834)	(0.0703)	(0.0682)	(0.0706)
One retired long before			0.0407		
One retired long before			(0.0407)		
			(0.0100)		
Both retired long before			0.00456		
			(0.0781)		
Judge dummies	Yes	Yes	No	Yes	Yes
	NT	NT	NT	V	V
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.195	0.210	0.025	0.205	0.220
Mean of dep. var.	0.576	0.576	0.554	0.576	0.576
<i>p</i> -value $H_0: \lambda_1 = \lambda_2$	0.411	0.376	0.029	0.400	0.371
$p$ -value $H_0^1: \beta + \lambda_1 = 0$	0.457	0.416	0.040	0.483	0.487
$p$ -value $H_0^2: \beta + \lambda_2 = 0$	0.903	0.816	0.598	0.871	0.803

Table 3: Effect of pandering incentives on decisions.

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. The mean of the dependent variable is the probability that the government wins a case with mean importance when it is decided by a control group bench. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

over their tenure.

The estimated values for the interaction term from columns (1)-(5) indicate that for a case that is one standard deviation higher than the mean in importance, the probability of the government winning is about 24 to 30 percentage points higher when the case is decided by a bench with one judge retiring long before an election relative to a bench composed of judges both of whom retire shortly before an election. Similarly, the likelihood of the same case being decided in favour of the government is 28 to 39 percentage points higher when the case is decided by a bench with both judges retiring long before an election relative to both judges retiring shortly before.

We also test the hypothesis that pandering increases as the number of judges retiring long before an election increases from one to two. We note that the estimate for  $\lambda_2$  is always greater than that of  $\lambda_1$ . However, in most specifications we fail to reject the null hypothesis that  $\lambda_1 = \lambda_2$ . We discuss the tests of  $H_0^1$  and  $H_0^2$  in appendix C.2.

Based on the mean of the dependent variable and the effect of importance we observe that the government has a 14–27% chance of winning a case that is one standard deviation higher than mean importance that is decided by a bench with both judges retiring shortly before an election. Our estimates imply that the probability of the government winning such a case more than doubles when it is instead decided by a bench with both judges retiring long before an election. We also note that the coefficient of importance is negative and significant in all specifications. We discuss this in appendix E.1.

Note it is possible that the "control" benches, that is, benches where both judges retire shortly before an election, have *some* rather than *no* incentives to pander. In that case, the comparison between "treatment" and "control" benches is not a comparison between benches with and without incentives, but rather a comparison between benches with stronger and weaker incentives to pander. Therefore, our estimates of this difference are lower bounds on the true effect of pandering incentives on judicial decisions.

In appendix C, we consider how litigants may respond to the presence of pandering incentives in the SC. In particular we consider the following possibilities. First, in appendix C.1, we investigate "bench hunting". Second, in appendix C.2, we check whether the government varies its litigation effort in response to the retirement characteristics of the bench to which the case is assigned. We also analyse the effect of such a response on our estimates. In appendix C.3 we discuss the effects of the settlement of cases on our estimates.

## 5.1 Pandering close to retirement

The results so far do not allow a judge's incentive to pander to vary over his tenure. However, it is natural to expect that these incentives would become stronger when the judge is close to retirement. To investigate this possibility, we define a new case-judge-level variable "retiring soon" to denote whether the case was decided during the term of the government under which the judge retires.

To clarify, consider the following example illustrated in fig. 1. In the figure, the numbers

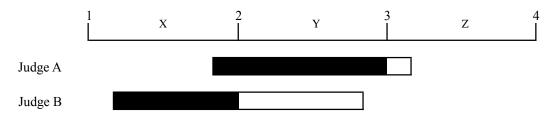


Figure 1: Illustration of "retiring soon" (white) vs "not retiring soon" (black)

1–4 represent the four elections in our sample and the intervals between them represent the terms of the governments. The bars represent the tenures of two hypothetical judges. Judge A retires long before election 4, during the term of government Z, whereas Judge B retires shortly before election 3, during the term of government Y. We may expect the pandering incentives of Judge A to be stronger in the period between elections 3 and 4 (the white area of his tenure), that is, during Z's term. Similarly, even though Judge B retires shortly before an election, he could face different incentives when deciding cases during the X's term (black area) and during Y's term (white area).

We interact the "retiring soon" variable with pandering incentives as defined in eq. (2). The results are reported in table 11 in appendix B. Note that because not all the possible combinations of retired long before and retiring soon are populated in our sample, not all coefficients can be estimated.

Our estimates of  $\lambda_1$  and  $\lambda_2$  remain positive although the estimates of  $\lambda_1$  are no longer significant. The estimates of the coefficients of the interaction of retired long before with retiring soon and importance are consistently positive and they are significant in the specification without judge dummies in column (3). This offers some weak evidence that judges retiring long before pander more in important cases when they are close to retirement.

For completeness, we also estimate the specification in eq. (1) with the addition of "retiring soon" and its interactions. The results are reported in table 12 in appendix B and we observe they remain qualitatively similar to those reported in table 10.

#### 5.2 Robustness

In this section, we test the robustness of our results to perturbing different elements of the baseline specification. In addition to the checks reported in this section we also show that the results are robust to alternative functional forms (logit and probit), inclusion of cases with no clear winner, and estimation with different restrictions on the effect of the number of judges retiring long before an election. These results are included in appendix D

#### 5.2.1 Disaggregated effects of election-retirement distance

The regression specification in (2) assumes that pandering incentives are active when a judge retires more than 47 weeks before the next election and inactive otherwise. It is possible however that even among judges retiring more than 47 weeks before the next election, pandering incentives vary based on how long before the next election they retire. In this section, we estimate the heterogenous effect of pandering incentives separately for benches based on which of the four 47 week periods before the next election the judges retire. Since there are two judges in each bench and they can retire in one of four such periods, there are 10 possible combinations which we call retirement categories. We therefore estimate

$$won_{ikt} = \alpha_0 + \sum_j \alpha_j b_{jk} + \delta_t + \beta \ importance_i + \\ + \sum_{\ell=1}^{9} \lambda_\ell \ (importance_i \times retirement \ category_{\ell k}) + \mathbf{X}'_i \eta + \varepsilon_{ikt} \,, \tag{3}$$

where retirement category  $\ell_k$  is a dummy taking value 1 if the judges in bench k belong to retirement category  $\ell$  and 0 otherwise. Our base is retirement category 0 which corresponds to both judges retiring shortly (0–1 year) before an election.<sup>30</sup> The correspondence between the other categories and the number of judges retiring in each year is shown in table 14 in appendix B, together with the estimates of  $\lambda_{\ell}$ .

We can interpret the coefficient estimate for an interaction term, for example  $\lambda_3$ , as the change in the probability that the government wins an important case (that is, a case with one standard deviation higher than mean importance) when we replace one judge from a bench with both judges retiring close to an election such that one retires between 32–48 months before the next election.

All the estimates of  $\lambda_{\ell}$  are positive and almost all are significant at 1% indicating that all benches pander more than benches where both judges retire shortly before an election.

We also test the robustness of our results to perturbing the threshold for when a judge is considered to have retired long before an election. In particular, our results are robust to choosing thresholds of 6, 12, 18 and 24 months as shown in table 18 in appendix B. We note that the estimates of  $\lambda_1$  and  $\lambda_2$  in columns (4) and (8) for a threshold of 2 years are markedly smaller in magnitude than the corresponding ones in the main results. This is as expected, since many judges in the treatment groups are now included in the control group, thereby attenuating the difference in behaviour between the groups.

Finally, we have included scatter plots of the probability of deciding in favour of the government against the distance from retirement to election. We do this by focusing on judgement authors and using their retirement to election distance. These plots are presented in in fig. 4 and fig. 5 in appendix B. We observe that the plots for important cases are suggestive of an upward relationship between retirement distance and the probability of deciding in favour of the government between 0 and 2 years. A similar pattern does not emerge from a visual inspection of the plots with all and non-important cases.

 $<sup>^{30}</sup>$ For simplicity we round off 0.904 years to 1 year so that we can estimate the specification with retirement categories of equal lengths.

#### 5.2.2 Controlling for other interactions

One concern with our results is that the interaction terms that capture pandering incentives are potentially proxying for some other variables that affect the outcome of the case. Although we include case controls in our regressions, it is possible that the true effect of these controls on decisions is through an interaction with importance or retirement distance. In this section, we address this concern by separately interacting the controls that were significantly different across our "treatment" and "control" groups with the two variables that together make up pandering incentives.

The results are presented in table 4. In the first column, we present our baseline results for comparison. In column (2) we consider whether the two treatment groups rule cases differently when UOI is appellant/petitioner relative to when UOI is the respondent. Similarly, in column (3) we control for the interaction of importance with the role of the UOI. In columns (4) and (5) we do the same with the years between the decision date of the case and the next election date. Finally, in columns (6) and (7) we repeat this exercise with the length of the tenure of the junior judge at the time of the decision.

We observe that the coefficients on pandering incentives continue to be robust to the inclusion of these interactions, and the coefficient estimates in table 4 are very similar in magnitude to our baseline specification reported in the first column, suggesting that the results are unlikely to be driven by the interaction of treatment benches or importance with other case characteristics.

#### 5.2.3 Different proxies for importance

In this section, we test the robustness of the results with respect to varying the proxy for importance.

So far, we have used the normalised first principal component of the four different proxies presented in section 4 as our index for importance. These include the total number of senior and junior advocates appearing in the case since in general we do not separately observe the senior and junior advocates appearing for the government. To test the robustness of our results to only using the advocates appearing for the government we restrict our attention to those cases where the senior and junior advocates for the government are explicitly enumerated. We report the results in table 16 in appendix B. We find that although the magnitude of the estimates is lower the results remain qualitatively similar.

Next, we present results using the different proxies that make up our importance index. Results are reported in table 15 in appendix B. To begin with, we use the presence of Attorney or Solicitor General as a proxy for importance.<sup>31</sup> We see in columns (1) and (2) that the estimates for the interaction term are positive.

In columns (3) and (4), we use the number of Senior Advocates appearing in the case as

 $<sup>^{31}</sup>$ We use the presence of either Attorney or Solicitor General as there are only 17 cases in our sample where only the Attorney General appears.

	Base	UO	l role	Years from ca	ase to election	on Te	nure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Importance	-0.287***	-0.277***	-0.275***		-0.336***	-0.308***	-0.426***
	(0.0450)	(0.0530)	(0.0483)	(0.0466)	(0.0810)	(0.0466)	(0.105)
One retired long before	0.244***	0.229***	0.239***	$0.252^{***}$	$0.241^{***}$	0.280***	0.230**
$\times$ Importance	(0.0745)	(0.0819)	(0.0750)	(0.0756)	(0.0720)	(0.0795)	(0.0966)
Both retired long before	0.299***	0.290***	0.292***	0.306***	0.300***	$0.317^{***}$	0.297***
$\times$ Importance	(0.0706)	(0.0745)	(0.0724)	(0.0690)	(0.0694)	(0.0694)	(0.0718)
UOI role		$0.201^{**}$ (0.0866)	$0.0901^{*}$ (0.0517)				
UOI role $\times$ One retired		-0.0189					
long before		(0.0838)					
UOI role $\times$ Importance			-0.0597 (0.0623)				
Years from decision to election				0.0108 (0.0704)	-0.0123 (0.0336)		
One retired long before				-0.00602	(0.0000)		
$\times$ Years from decision to election				(0.0377)			
Both retired long before				-0.0329			
$\times$ Years from decision to election				(0.0684)			
Years from decision to				· · · ·	0.0223		
election $\times$ Importance					(0.0280)		
Junior judge's tenure						0.0389	-0.0260
						(0.149)	(0.0557)
One retired long before						-0.0750	
$\times$ Junior judge's tenure						(0.134)	
Both retired long before						-0.0762	
$\times$ Junior judge's tenure						(0.133)	
Senior judge's tenure						$0.00306 \\ (0.0522)$	$0.0599 \\ (0.0532)$
One retired long before × Senior judge's tenure						$0.0617^{*}$ (0.0349)	
Both retired long before						0.0686	
$\times$ Senior judge's tenure						(0.0443)	
Junior judge's tenure $\times$ Importance							$\begin{array}{c} -0.000413 \\ (0.0309) \end{array}$
Senior judge's tenure $\times$ Importance							0.0348 (0.0234)
Constant	$2.589^{***}$ (0.793)	$2.437^{***}$ (0.821)	$2.579^{***}$ (0.812)	$2.516^{***}$ (0.814)	$2.607^{***}$ (0.800)	$1.830^{**}$ (0.779)	$2.004^{***}$ (0.756)
Observations $R^2$	652 0.220	652 0.223	652 0.222	652 0.221	652 0.223	652 0.232	652 0.233

Table 4: Controlling for other interactions

Dependent variable is whether government won. All specifications include judge dummies, year dummies and the following case controls: type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, the tenures of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

a proxy for its importance. In columns (5) and (6) we use the number of advocates, that is, junior advocates with no special designation, as our proxy for importance. We observe that the estimates for the interaction terms remain positive and mostly significant across these specifications. We observe that the results are qualitatively similar regardless of the particular proxy used. These results support our strategy of collapsing these four variables into one index using the first principal component.

So far we have assumed that pandering incentives increase linearly with importance. Next, we disaggregate our importance measure into quartiles and we report the results in table 17 in appendix B. The lowest quartile of cases by importance forms the omitted category. We observe that the estimates of the interaction terms increase in magnitude with the quartiles of importance, being significant for the highest quartiles.

#### 5.2.4 Appeals

In this section we restrict our attention to the sub-sample of cases that are appeals. This sub-sample allows us to control for the decision of the lower court. Note that the respondent in the appealed case is the party that won in the lower court. Naively we may expect them to have a higher likelihood of winning in the SC compared to the appellant. However, this ignores the fact that this sub-sample suffers from selection bias. This is because appellants *choose* whether to appeal based on their assessment of the likelihood of the appeal being successful. Therefore it is possible that in this sub-sample the appellant has a stronger case than the respondent.

We run specification (2) with the addition of an indicator for "UOI won in the lower court". We note that this variable is consistently negative and, upon inclusion of the judge dummies, also statistically significant. This is consistent with the discussion above which suggest that, conditional on being appealed, the appellant has a stronger case in the SC. Assume that this negative correlation arises as a result of the losing party in the lower court appealing only those cases that are likely to be overturned by the SC on merits. Then, "UOI won in the lower court" is a good (inverse) proxy for the merits of the case.

One concern with our baseline results is that our importance measure correlates with the merits of the case. To address this we include "UOI won in the lower court", its interaction with bench retirement characteristics, and its interaction with importance. Columns (1)-(5) of table 27 in appendix B report the results of these regressions while column (6) reports the results of running the original specification on the sub-sample of appeals for comparison. We find that the estimates of the two coefficients of interest remain positive in all specifications. Moreover, they are similar to the baseline results within the restricted sample reported in column (6). This suggests that our main results are not driven by the correlation between merits and pandering incentives.

## 6 Pandering incentives and judgement authorship

In this section, we examine how pandering manifests itself through writing favourable judgements rather than simply being on a bench that decides in favour of the government.

The allocation of a case to a bench is randomised but the authorship of the judgement is not. Once the two judges decide on the outcome of the case, they also jointly decide which one of the two writes the judgement. By convention, the senior judge decides who (either himself or the junior judge) should author the first judgement. However, in case of any disagreement between the two judges the other judge (the one who did not author the first judgement) has discretion to author a second judgement. Therefore, both can write separate judgements. However, this happens only in 6 cases in our sample.<sup>32</sup> The name of the judge writing the judgement is always identified when a judgement is delivered. In this section we explore the choice of judgement authorship to shed more light on the mechanism through which pandering occurs.

We expect that rather than simply sitting on a bench that decides in favour of the government, pandering may manifest itself in actually writing judgements that are favourable to the government. There are two reasons for this. First, being the author of a favourable judgement is more visible, and consequently more likely to be rewarded, compared to just sitting on the bench in a case that is decided in favour of the government. Conversely, the judge not writing the judgement is less likely to be noticed and therefore less likely to be rewarded for favourable judgements and punished for unfavourable ones. Second, the literature on signalling shows that costly actions are an effective form of communication in environments where talk is cheap. Since a judge's reputation depends on the judgements he has written, committing to written judicial reasoning for favouring the government may be a more credible way for a judge to signal his willingness to conform to the government's preferences in his role after retirement in case he receives a post-SC appointment. As such we believe that writing favourable judgement may be more important than simply deciding in favour of the government when it comes strengthening the prospects of receiving post-SC appointments. This hypothesis is supported by the results in section 7, where we will see that writing favourable judgements rather than simply deciding in favour of the government is positively associated with securing post-SC appointments.

If this is true, we expect to see a pattern in judgement writing. In particular, judges that retire long before an election should be more likely to write judgements in cases that are important and where the government wins. To test this we run the following specification:

author retired long before<sub>*ikt*</sub> = 
$$\alpha + \sum_{j} \alpha_{j} b_{jk} + \delta_{t} + \beta \text{ importance}_{i} + \gamma \text{ won}_{ik}$$
  
+  $\lambda \text{ importance}_{i} \times \text{ won}_{ik} + \mathbf{X}'_{ik} \eta + \varepsilon_{ikt}.$  (4)

 $<sup>^{32}</sup>$ In general the rarity of all judges writing separate judgements in the same case is something of a puzzle. See Posner (2010) and Epstein, Landes, and Posner (2013) for explanations of this phenomenon based on the ideas of effort and dissent aversion.

	(1)	(2)	(3)	(4)	(5)
Importance	$-0.0695^{*}$	$-0.0775^{*}$	-0.0528	-0.0870**	-0.0926*
	(0.0377)	(0.0391)	(0.0481)	(0.0384)	(0.0474)
UOI won	-0.0505	-0.0194	-0.199**	-0.0374	-0.0166
	(0.0722)	(0.0697)	(0.0776)	(0.0779)	(0.0759)
UOI won $\times$ Importance	0.222***	0.214**	0.237***	0.240***	0.223***
*	(0.0747)	(0.0820)	(0.0681)	(0.0763)	(0.0831)
Senior retired long before				-0.280	-0.437**
				(0.210)	(0.204)
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	248	248	248	248	248
$R^2$	0.561	0.603	0.111	0.592	0.626
Mean of dep. var.	0.452	0.433	0.543	0.446	0.432

Table 5: Pandering incentives and judgement authorship

Dependent variable is an indicator for whether the judge retiring long before wrote the judgement. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, the tenures of the senior and junior judge at the time of decision and whether the senior judge retired long before an election. The mean of the dependent variable is the probability with which the judge retiring long before writes the judgement in a case with mean importance that is decided against the government. Standard errors reported in the parentheses are clustered at the bench level . \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

We restrict our attention to the subsample of cases where one of the judges on the bench retired long before an election and the other retired shortly before an election. This is because only within this sample is there variation in our dependent variable "author retired long before".

Our dependent variable is an indicator of whether the author of the judgement retires long before an election. If judges with pandering incentives want to be noticed by the government when they decide in its favour in important cases, we would expect  $\lambda$  to be positive. To control for the possibility that the senior judge's retirement-election distance may affect who writes the judgement, because there may be a seniority norm in judgement writing, we include an indicator for whether the senior judge on the bench retires long before an election among our case controls.<sup>33</sup>

The results are reported in table 5. We observe the estimates for  $\lambda$  are positive across all specifications even after controlling for case characteristics, and judge and year dummies. Note that the sample size drops compared to our main results, as we focus on the subsample of cases where one of the two judges retired long before an election and the other retired shortly before an election. The mean of the dependent variable is close to one half in all columns, indicating that when the case is decided against the government and is not important, the judge who retires long before an election is as likely to write the judgement as the judge who retires shortly before an election. The estimates of the interaction coefficient indicate that in important cases that the government wins, the judgement is more likely to be authored by the judge who retired long before an election.

# 7 Rewards for pandering

Having identified the presence of corruption on the "supply" side in the form of pandering by judges, we now focus on the "demand" side in the form of rewards by governments. In principle, there could be many ways in which the government rewards judges who rule in its favour. We explore whether there is any evidence that pandering is actually rewarded by the government in a particular form, namely post-Supreme Court jobs.

Before discussing our results we note that practice of awarding post-SC jobs has been widely criticised in India.<sup>34</sup> For example, Indira Jaising, former Additional Solicitor General of India, commenting on the appointment of former Chief Justice of India (CJI) H. L. Dattu to Chairperson of the National Human Rights Commission, said that "Independence can be undermined in different ways and one of them is offering post retirement benefits immediately upon retirement".<sup>35</sup> Senior Counsel Arun Jaitley, former Finance Minister, said that "Pre-

 $<sup>^{33}</sup>$ As we explain in appendix E.3, we cannot include an indicator for each of the senior and junior judge retiring long before, due to collinearity with the judge dummies.

<sup>&</sup>lt;sup>34</sup>See for example "Law in numbers: Evidence-based approaches to legal reform", a report by Vidhi Centre for Legal Policy, an independent Indian think tank. Among other challenges facing the Indian judiciary, it highlights the issue of post-SC jobs.

<sup>&</sup>lt;sup>35</sup>Live Law, 27 Nov 2015, CJI Dattu may be offered the post of NHRC Chairperson; Ms. Indira Jaising says

retirement judges are influenced by a desire for post-retirement jobs".<sup>36</sup> Even R. M. Lodha, a former CJI, on the day of his retirement from the Supreme Court, said "I hold the view that the CJI, judges of the Supreme Court, Chief Justice of High Courts and judges of High Courts should not accept any constitutional position or assignment with government".<sup>37</sup> and "The idea is to insulate judges from the lure of post-retirement jobs. Judges don't have to run after politicians for lucrative posts after retirement if they get a salary".<sup>38</sup>

In this section, we investigate this issue by examining whether post-SC job prospects of a judge vary with his judicial behaviour. In particular, in section 6 we have established that a mechanism through which pandering occurs is judgement authorship in important cases decided in favour of the government. To investigate whether this behaviour is rewarded we estimate

$$job_{j} = \pi_{0} + \pi_{1} num important cases UOI won as author_{j} + \mathbf{Z}_{j}^{\prime} \zeta + \varepsilon_{j}.$$
 (5)

The dependent variable is an indicator for whether the judge received a post-SC appointment from the government in power at the time of his retirement.

### 7.1 Baseline results

We first estimate eq. (5) with OLS and report the results in table 6. We find that the estimates for  $\pi_1$  are positive across all specifications and significant when using the presence of AG or SG as a proxy for importance, indicating that authoring judgements in important cases decided in favour of the government is indeed positively associated with securing a post-SC job. All specifications include an indicator for whether the judge was ever the CJI to proxy and dummies that indicate the judges' religion. If interpreted causally, the estimates in the last 4 columns suggest that authoring the judgement in one important case decided in favour of the government increase the likelihood of being appointed to a post-SC job by between 13% and 17%.

A potential concern is that experience-related judge characteristics such as his tenure, the expertise in legal areas relevant to post-SC jobs and productivity could affect the probability of obtaining a post-SC job but are also correlated with the number of decisions authored in favour of the government in important cases. To address this issue, we include the judge's tenure and his productivity, measured by the ratio of total cases decided in our sample and tenure. We constructed a proxy for legal expertise relevant to post-SC jobs as follows. For all 2605 cases involving the Union of India, we extracted the keywords describing the case in the database. We focused on keywords that appeared at least 10 times, of which there were

independence of judiciary undermined by post retirement benefits

<sup>&</sup>lt;sup>36</sup>NDTV, 1 Oct 2012, Judges' verdicts are influenced by post-retirement jobs: Arun Jaitley

<sup>&</sup>lt;sup>37</sup>Live Law, 27 Sep 2014, There should be a cooling off period of 2 years for judges to accept any appointment after retirement; Justice Lodha

<sup>&</sup>lt;sup>38</sup>Indian Express, 25 Oct 2015, As CJI, I told PMs of way to insulate judges from lure of post-retirement jobs: Lodha

		Median importance AG or SG					or SG	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of cases, UOI won,	0.00461	0.00894	0.000503	0.00723	$0.145^{***}$	0.132**	0.162**	$0.168^{**}$
important, author	(0.0169)	(0.0139)	(0.0328)	(0.0352)	(0.0503)	(0.0498)	(0.0669)	(0.0684)
Number of cases, UOI won,				0.0162				-0.0121
important, non-author				(0.0358)				(0.102)
Number of cases, UOI lost,				-0.00797				0.0389
important				(0.0325)				(0.0942)
Retired long before an		0.282**	0.295**	$0.287^{*}$		$0.234^{*}$	0.202	0.206
election		(0.134)	(0.140)	(0.145)		(0.132)	(0.139)	(0.145)
Tenure			0.0426	0.0407			0.0628	0.0621
			(0.0785)	(0.0802)			(0.0775)	(0.0784)
Number of cases relevant to			-0.00385	-0.00344			-0.0131	-0.0139
post-SC jobs			(0.0159)	(0.0177)			(0.0121)	(0.0122)
Productivity			0.0300	0.0236			0.0565	0.0556
·			(0.0681)	(0.0689)			(0.0643)	(0.0629)
Constant	0.326	0.0360	-0.237	-0.254	0.333	0.0998	-0.174	-0.152
	(0.290)	(0.326)	(0.526)	(0.526)	(0.284)	(0.315)	(0.529)	(0.557)
Observations	72	72	72	72	72	72	72	72
$R^2$	0.026	0.075	0.083	0.088	0.088	0.122	0.137	0.139

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (4) the number of important cases is measured by the number of cases above the median in the importance index and in columns (5) - (8) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

664. We then identified a subset of 198 keywords associated with legal areas relevant to at least one post-SC job in our sample. The list of keywords is shown in appendix A.3. For each judge we use the number of cases he decided which feature at least one of these keywords as a measure of his legal expertise relevant to post-SC jobs.

In column (7) we include the experience controls and find that the coefficient estimate of  $\pi_1$  remains positive and significant. In column (8), in addition to our main explanatory variable, we include the number of important cases decided in favour of the government for which the judge was not the author and also the number of important cases decided against the government. The coefficient estimates for both these variables are small and insignificant suggesting that indeed authoring favourable judgements in important cases is rewarded with post-SC jobs.

We repeat this analysis using the years from retirement to election instead of an indicator for retired long before. The results reported in table 31 in appendix B are similar to those in table 6. Furthermore, we explore whether there exists a time gradient in these effects. In particular, we examine whether the impact of authoring a favourable judgement in an important case on the likelihood of a job is increasing in the size of the "reward window", that is the distance from retirement to election. To do so we interact the number of favourable judgements authored in important cases with the years from the time the judge's retires to the next election. The results are reported in table 32 in appendix B. There does appear to be some evidence for a time gradient: in the regressions where importance is measured using our index, the interaction coefficient is positive and significant. This suggests that authoring favourable judgements in important cases leads to a greater increase in the likelihood of a post-SC job when there is more time between the judge's retirement and the next election.

Finally, we regress eq. (5) using logit and probit and find that the effect of authoring favourable judgements in important cases is qualitatively similar. These results are reported in tables 33 and 34 in appendix B.

#### 7.2 Instrumental variables estimation

Although we control for observable judge characteristics, the positive relationship between authoring favourable judgements in important cases and obtaining post-SC jobs could be explained by unobservables, such as political ideology, driving both their rulings and their likelihood of obtaining a post-SC job. In an attempt to address this possibility, we estimate eq. (5) with 2SLS. Our empirical analysis for the case-level regressions suggests an instrument for the number of favourable judgements authored in important cases, namely the interaction of the retired long before with the number of important cases decided. We report the results in table 7. The second stage results reported in panel B are consistent with the OLS ones (shown again for convenience in panel A) in that the estimates of  $\pi_1$  are positive and significant for the same specifications. Moreover, we test the hypothesis of equality of the OLS and 2SLS estimates and we fail to reject it for all specifications as shown by the *p*-values of the Hausman test. Under the assumption that the instrument is valid, this suggests that the OLS estimates

	Mec	Median importance			AG or SG	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: OLS						
Number of cases, UOI won,	0.00461	0.00894	0.000503	$0.145^{***}$	$0.132^{**}$	$0.162^{**}$
important, author	(0.0169)	(0.0139)	(0.0328)	(0.0503)	(0.0498)	(0.0669)
Panel B: Second stage						
Number of cases, UOI won,	0.0213	0.0242	0.154	$0.149^{**}$	$0.153^{**}$	$0.200^{*}$
important, author	(0.0250)	(0.0233)	(0.361)	(0.0720)	(0.0689)	(0.102)
Retired long before an		$0.304^{**}$	0.188		$0.228^{*}$	0.181
election		(0.136)	(0.286)		(0.125)	(0.136)
Constant	0.298	-0.0111	-0.0793	0.333	0.105	-0.160
	(0.289)	(0.323)	(0.663)	(0.272)	(0.296)	(0.492)
Panel C: First stage			. ,			
Number of important cases	$0.345^{***}$	$0.342^{***}$	0.0357	$0.487^{***}$	$0.489^{***}$	$0.399^{***}$
$\times$ Retired long before	(0.0449)	(0.0476)	(0.0564)	(0.0862)	(0.0834)	(0.0859)
Retired long before an		-1.123	0.630		0.308	0.450***
election		(1.823)	(0.580)		(0.204)	(0.136)
Constant	0.837	1.969	-0.619	-0.203	-0.511	-0.438
	(0.883)	(2.025)	(1.798)	(0.370)	(0.431)	(0.552)
Panel D: Reduced form						
Number of important cases	0.00736	0.00827	0.00551	$0.0727^{*}$	$0.0746^{*}$	$0.0796^{*}$
$\times$ Retired long before	(0.00948)	(0.00894)	(0.0113)	(0.0415)	(0.0393)	(0.0468)
Retired long before an		$0.277^{**}$	$0.285^{**}$		$0.275^{**}$	$0.271^{**}$
election		(0.130)	(0.138)		(0.129)	(0.135)
Constant	0.316	0.0365	-0.175	0.303	0.0273	-0.247
	(0.288)	(0.318)	(0.543)	(0.340)	(0.367)	(0.558)
Experience controls	No	No	Yes	No	No	Yes
Observations	72	72	72	72	72	72
First-stage $F$	59.08	51.44	0.400	31.86	34.30	21.60
Hausman test <i>p</i> -value	0.447	0.441	0.622	0.952	0.753	0.711

Table 7: Rewards for pandering (2SLS)

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) – (3) the number of important cases is measured by the number of cases above median in the importance index and in columns (4) – (6) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. The three experience controls are tenure, number of job-related cases and productivity. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

are consistent. Next, we discuss the validity of this assumption.

We naturally expect our instrument to be correlated with the number of favourable decisions authored in important cases. This is because in section 6 we find that judges retiring long before are more likely to author judgements in cases that are both important and decided in favour of the government. This is confirmed by the first-stage results reported in panel C. Moreover, we believe that both variables whose product constitutes the instrument are exogenous. First, the number of important cases decided is exogenous because a) conditional on expertise, the allocation of cases is random and therefore uncorrelated with unobservable judge characteristics and b) judges do not appear to strategically manipulate the number of important cases decided (out of the ones allocated to them) as we show in appendix E.2. Second, the indicator for retired long before is exogenous because (a) whether a judge retires long before an election is solely determined by his date of birth and electoral cycles, and (b) we control for its direct effect in the second stage.

We repeat the 2SLS analysis using the continuous measure of years from retirement to election instead of an indicator for retired long before. The results reported in table 35 in appendix B remain qualitatively similar.

Our maintained hypothesis in the case-level analysis that judges that retire long before an election have stronger incentives to pander is supported by the reduced form results reported in panel D. We observe that retiring long before an election significantly increases the likelihood of securing a post-SC, holding the number of important cases decided at its mean value. Moreover, an additional important case disproportionately increases the likelihood of a job for a judge who retires long before an election.

Overall, the results in this section suggest that authoring favourable judgements in important cases does indeed increase the probability of obtaining a post-SC job. There are two potential explanations for this. One possibility is that indeed the government intentionally rewards judges for pandering and this creates an incentive for the judges to alter their decisions. Another possibility is that the government is merely selecting judges who are more likely to comply with its preferences during their post-SC career. In this second case, pandering could arise in a non-pooling equilibrium where authoring favourable judgements is an informative signal of the judge's willingness to comply. Since they both generate incentives to pander and since we cannot discern the government's motives, these two explanations are observationally equivalent. Consequently, we use the phrase "rewards for pandering" to describe how these jobs act as carrots, regardless of the government's intentions.

## 8 Conclusion

We find that judges respond to pandering incentives by ruling in favour of the government. Moreover, judges who have authored favourable judgements in important cases are more likely to receive prestigious government jobs. Furthermore, we characterise two channels through which pandering occurs. First, pandering occurs through actively writing favourable judgements rather than passively being on a bench that decides the case. Second, pandering works through potentially harmful manipulation of actual decisions in favour of the government rather than through more benign means, such as strategic delay of unfavourable decisions. Our results show a rational *behavioural response* to institutional incentives in the form of career concerns.

The findings we report are important because this kind of corruption suggests the possibility of serious miscarriage of justice, with far-reaching welfare implications. However, we note that the welfare implications depend on whether the "correct" rulings, i.e., the ones judges would make in the absence of pandering incentives, are welfare-maximising. For instance, pandering could lead to a welfare gain if the Supreme Court is otherwise biased against the government, and pandering incentives help steer the Court towards "better" decisions. This is related to the idea, found in Huntington (1968) and Bardhan (1997), that the presence of corruption can improve outcomes in a second-best world with many distortions already present. Evaluating whether pandering reduces or increases welfare faces two problems. First, identifying anything about the "correctness" of a ruling requires deep textual analysis, which is infeasible on a large scale. Second, there is no natural way of identifying the welfare-maximising ruling when it requires taking sides between, for example, a pro-free speech Court and a pro-security government.

Nevertheless, regardless of the welfare implications on litigants, our results have implications on institutional design. Separation of powers, foundational to modern democratic institutions, is not as clear in practice as it is in theory. Our analysis suggests that the prospect of being appointed to government positions after retirement could be a way in which the executive exercises control over an otherwise independent judiciary, in countries with judicial term limits.

## References

- Abrams, David, Marianne Bertrand, and Sendhil Mullainathan (2011). "Do Judges Vary in Their Treatment of Race?" Journal of Legal Studies 41 (2), pp. 347–383.
- Ashenfelter, Orley, Theodore Eisenberg, and Stewart J. Schwab (1995). "Politics and the Judiciary: The Influence of Judicial Background on Case Outcomes". *Journal* of Legal Studies 24 (2), pp. 257–281.
- Banerjee, Abhijit, Rema Hanna, and Sendhil Mullainathan (2012). "Corruption". In: Handbook of Organizational Economics. Princeton, NJ: Princeton University Press.
- Bardhan, Pranab (1997). "Corruption and Development: A Review of Issues". Journal of Economic Literature 35, pp. 1320–1346.
- Bertrand, Marianne, Matilde Bombardini, and Francesco Trebbi (2014). "Is It Whom You Know or What You Know? An Empirical Assessment of the Lobbying Process". *American Economic Review* 104 (12), pp. 3885–3920.

- Black, Ryan C. and Ryan J. Owens (2016). "Courting the President: How Circuit Court Judges Alter Their Behavior for Promotion to the Supreme Court". American Journal of Political Science 60 (1), pp. 30–43.
- Bobonis, Gustavo J., Luis R. Cámara Fuertes, and Rainer Schwabe (2016). "Monitoring Corruptible Politicians". *American Economic Review* 106 (8), pp. 2371–2405.
- Boyd, Christina L., Lee Epstein, and Andrew D. Martin (2010). "Untangling the Causal Effects of Sex on Judging". American Journal of Political Science 54 (2), pp. 389– 411.
- Callen, Michael and James D. Long (2015). "Institutional corruption and election fraud: Evidence from a field experiment in Afghanistan". American Economic Review 105 (1), pp. 354–381.
- Cameron, A. Colin and Douglas L. Miller (2014). "Robust inference for dyadic data". *Unpublished.*
- Chandra, Aparna, William H.J. Hubbard, and Sital Kalantry (2017). "The unintended consequences of case-by-base rescue: An empirical study of Indian Supreme Court cases from 2010 to 2014". *Working Paper*.
- Chen, Daniel L, Tobias J Moskowitz, and Kelly Shue (2016). "Decision Making Under the Gambler's Fallacy: Evidence from Asylum Judges, Loan Officers, and Baseball Umpires". Quarterly Journal of Economics 131 (3), pp. 1181–1242.
- Dal Bó, Ernesto (2006). "Regulatory capture: A review". Oxford Review of Economic Policy 22 (2), pp. 203–225.
- Epstein, Lee, William M. Landes, and Richard A. Posner (2013). The behavior of federal judges: A theoretical and empirical study of rational choice. Cambridge, Massachusetts: Harvard University Press.
- Eren, Ozkan and Naci Mocan (2018). "Emotional judges and unlucky juveniles". American Economic Journal: Applied Economics 10 (3), pp. 171–205.
- Ferraz, Claudio and Frederico Finan (2008). "Exposing corrupt politicians: the effects of Brazil's publicly released audits on electoral outcomes". Quarterly Journal of Economics 123, pp. 703–745.
- (2011). "Electoral accountability and corruption: Evidence from the audit reports of local governments". *American Economic Review* 101, pp. 1274–1311.
- Ferrer, Rosa (2015). "The effect of lawyers' career concerns on litigation". Available at SSRN: https://ssrn.com/abstract=1138370 or http://dx.doi.org/10.2139/ssrn.1138370.
- Fisman, Raymond and Edward Miguel (2007). "Corruption, Norms and Legal Enforcement: Evidence from Diplomatic Parking Tickets". Journal of Political Economy 115 (6), pp. 1020–1048.
- Fisman, Raymond, Florian Schulz, and Vikrant Vig (2014). "The private returns to public office". *Journal of Political Economy* 122 (4), pp. 806–862.

- Garupa, Nuno and Tom Ginsburg (2015). Judicial Reputation: A Comparative Theory. The University of Chicago Press.
- Geerling, Wayne et al. (2018). "Hitler's Judges: Ideological Commitment and the Death Penalty in Nazi Germany". *Economic Journal* 128 (614), pp. 2414–2449.
- Green, Andrew and Albert Yoon (2016). "Triaging the law: Developing the common law on the Indian Supreme Court". Available at SSRN: http://ssrn.com/abstract=2816666.
- Helmke, Gretchen (2002). "The Logic of Strategic Defection: Court-Executive Relations in Argentina under Dictatorship and Democracy". American Political Science Review 96 (2), pp. 291–303.
- Huntington, Samuel P. (1968). *Political Order in Changing Societies*. New Haven: Yale University Press.
- Iaryczower, Matías, Pablo T. Spiller, and Mariano Tommasi (2002). "Judicial Independence in Unstable Environments, Argentina 1935-1998". American Journal of Political Science 46 (4), pp. 699–706.
- Iyer, Lakshmi and Anandi Mani (2012). "Traveling Agents: Political Change and Bureaucratic Turnover in India". *Review of Economics and Statistics* 94 (3), pp. 723– 739.
- Lessig, Lawrence (2013a). "Foreword: "Institutional Corruption" Defined". Journal of Law, Medicine & Ethics 41 (3).
- (2013b). "Institutional Corruptions". Edmond J. Safra Working Papers (1).
- Levy, Gilat (2005). "Careerist Judges and the Appeals Process". Rand Journal of Economics 36 (2).
- Li, Hongbin and Li-An Zhou (2005). "Political turnover and economic performance: the incentive role of personnel control in China". *Journal of Public Economics* 89 (9-10), pp. 1743–1762.
- Lim, Claire S.H., James M. Snyder, and David Strömberg (2015). "The Judge, the Politician, and the Press: Newspaper Coverage and Criminal Sentencing across Electoral Systems". American Economic Journal: Applied Economics 7 (4), pp. 103–135.
- Mookherjee, Dilip (1997). "Incentive Reforms in Developing Country Bureaucracies: Lessons from Tax Administration". In: Annual World Bank conference on development economics. Ed. by Boris Pleskovic and Joseph Stiglitz. The World Bank.
- Niehaus, Paul and Sandip Sukhtankar (2013). "Corruption dynamics: The golden goose effect". *American Economic Journal: Economic Policy* 5 (4), pp. 230–269.
- Olken, Benjamin A. (2007). "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". *Journal of Political Economy* 115 (2), pp. 200–249.
- Olken, Benjamin A. and Rohini Pande (2012). "Corruption in Developing Countries". Annual Review of Economics 4 (1), pp. 479–509.

- Pande, Rohini (2007). "Understanding Political Corruption in Low Income Countries". Handbook of Development Economics 4, pp. 3155–3184.
- Posner, Richard A. (2010). *How judges think*. Harvard University Press.
- Ramseyer, J. Mark (1998). "Judicial independence". In: *The New Palgrave Dictionary* of *Economics and the Law*. Macmillan.
- Ramseyer, J. Mark and Eric B. Rasmusen (1997). "Judicial independence in civil law regimes: The evidence from Japan". *Journal of Law Economics & Organization* 13, pp. 259–286.
- Robinson, Nick (2013). "Structure matters: The impact of court structure on the Indian and US Supreme Courts". American Journal of Comparative Law 61 (1), pp. 101– 138.
- Salzberger, Eli and Paul Fenn (1999). "Judicial independence: Some evidence from the English Court of Appeal". Journal of Law and Economics 42, pp. 831–847.
- Schneider, Martin R. (2005). "Judicial Career Incentives and Court Performance: An Empirical Study of the German Labour Courts of Appeal". European Journal of Law and Economics 20 (2), pp. 127–144.
- Shayo, Moses and Asaf Zussman (2011). "Judicial Ingroup Bias in the Shadow of Terrorism". Quarterly Journal of Economics 126 (3), pp. 1447–1484.
- Shleifer, Andrei and Robert W. Vishny (1993). "Corruption". Quarterly Journal of Economics 108 (3), pp. 599–617.
- Sukhtankar, Sandip and Milan Vaishnav (2015). "Corruption in India: Bridging Research Evidence and Policy Options". Brookings-NCAER India Policy Forum 2014.
- Vidal, Jordi Blanes I, Mirko Draca, and Christian Fons-Rosen (2012). "Revolving door lobbyists". American Economic Review 102 (7), pp. 3731–3748.

# A Data appendix

# A.1 Judge tenures and elections

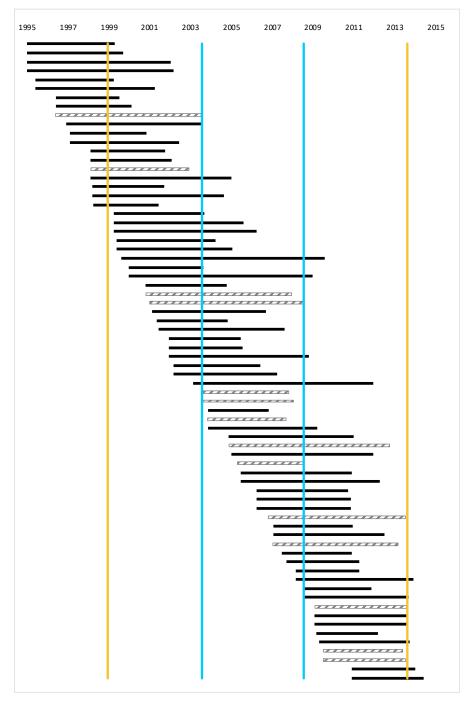


Figure 2: Each bar represents the tenure of a judge. Solid bars are for judges who retire at least 16 months before an election, while hatched bars are for judges who retire less than 16 months before an election. The saffron line represent elections won by the NDA while the light blue lines represent elections won by the UPA. The bars are sorted by the date of appointment to the Supreme Court. The last two judges are classified as retiring long before the election that is likely to occur in 2019.

## A.2 Post-SC jobs

Position	Institution	Frequency
Chairperson	Appellate Tribunal for Electricity	1
Chairperson	Armed Forces Tribunal	1
Chairperson	Competition Appellate Tribunal	1
Judge	International Court of Justice	1
Chairperson	Law Commission of India	3
Chairperson	Mahadayi Water Disputes Tribunal	1
Chairperson	Nanavati Commission	1
President	National Consumer Disputes Redressal Commission	2
Chairperson	National Forest Commission	1
Chairperson	National Green Tribunal	1
Chairperson/Member	National Human Rights Commission	4
Chairperson	Pay Commission	1
Chairperson	Press Council of India	2
Chairperson	S. Saghir Ahmed Commission	1
Chairperson	Telecom Disputes Settlement and Appellate Tribunal	3
Chairperson	Vamsadhara Water Disputes Tribunal	1

Table 8: Post-SC jobs by the government in power at the time of retirement and frequencies

Percent	Years from retirement to appointment
10%	-0.219
20%	-0.0466
30%	0.0329
40%	0.0740
50%	0.225
60%	0.367
70%	0.825
80%	1.37
90%	2.84

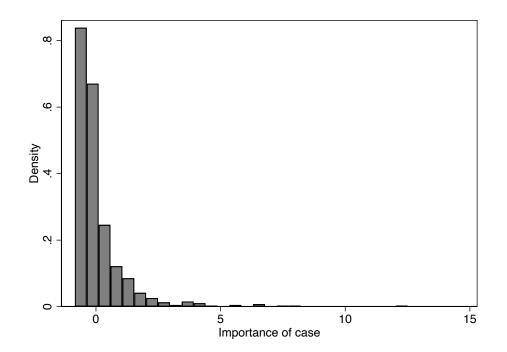
Table 9: Percentiles of years from retirement to post-SC appointment conditional on getting a post-SC job

### A.3 Post-SC job keywords in descending order of frequency

Constitution of India; Service Law; Environment Protection and Pollution Control; Administrative Law; Promotion; Interpretation of Statutes; Land Acquisition Act, 1894; Art. 32; Forests; Preventive

Detention; Judicial review; Human and Civil Rights; Labour Law; Pension; Art. 226; Armed Forces; Art. 136; PIL; Seniority; Art. 21; Natural justice; Ecology; Departmental enquiry; Constitution of India, Art. 14; Town Planning; Art. 14; Pay; Arbitration and Conciliation Act, 1996; Administrative Tribunals Act, 1985; Arts. 21 and 32; Army Act, 1950; Detention order; Compensation; Courts, Tribunals and Judiciary; Arts. 32 and 226; Land Acquisition and Requisition; Mining; Constitutional Law; Public Accountability, Vigilance and Prevention of Corruption; Administrative action; Army Rules, 1954; Debt, Financial and Monetary Laws; Arbitration Act, 1940; Natural Justice; Selection; Misconduct; Constitution of India, Art. 136; Departmental Enquiry; Scope of judicial review; Wildlife: Telecommunications Laws: Environment (Protection) Act, 1986: Mines and Minerals: Retirement: Arbitrariness: Mines and Minerals (Development and Regulation) Act, 1957: Constitution of India, Arts. 14 and 16; Encroachment/Diversion of/Intrusion into forest land; Police; Arbitration; Contract Act. 1872: Parity in employment: Equal pay for equal work: Arts. 32 and 21: Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002; Compulsory retirement; Constitution of India, Art. 32; Industrial Disputes Act, 1947; Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995; Administrative or Executive Function; Land use; Right to food, shelter and basic amenities; Sawmills/Timber/Wood-based industries/Felling of trees; Mines and Minerals (Regulation and Development) Act, 1957; Back wages; Government Contracts/Tenders: Pay scale: Termination of service: Mineral Concession Rules, 1960: Telecom Regulatory Authority of India Act, 1997; Polluter pays principle; Bhopal Gas Leak Disaster; Securities, Markets and Exchanges; Forest (Conservation) Act, 1980; Forest (Conservation) Act, 1980, S. 2; Disability pension; Company Law; Termination; Information Technology Act, 2000; Information Technology, Internet, Computer and Cyber Laws; Debt and Financial Laws; Recruitment Process; Court Martial; Voluntary retirement; Protection of Human Rights Act, 1993; Hazardous or Industrial Materials/Waste; Discrimination; Reinstatement; Protection and conservation of forests; Hazardous Waste; Service matters; Prevention of Terrorism Act, 2002; Gratuity; Air (Prevention and Control of Pollution) Act, 1981; Retiral benefits; Employees' Provident Funds and Miscellaneous Provisions Act, 1952; Inter se seniority; Arts. 226 and 32; Telegraph Act, 1885; Property Law; Price fixation; Licence; Determination of seniority; Citizenship, Migrants and Aliens; Prisons, Prisoners and Probation of Offenders; Endangered species; Interference in service matters; Art. 16(4); Wildlife (Protection) Act, 1972; Monopolies and Restrictive Trade Practices Act, 1969; Pension Regulations for the Army, 1961; Water (Prevention and Control of Pollution) Act, 1974; Project Tiger; Seniority and promotion; Foreigners Act, 1946; Sardar Sarovar Dam; Hazardous waste; Forest; Diversion of forest land; Police reforms; Press and Media Laws; Tribunals; Army; Arrears of pay; Compassionate appointment; Parity in Employment; Length of service; Armed Forces (Special Powers) Act, 1958 (as amended); Recovery of Debts Due to Banks and Financial Institutions Act, 1993; Arts. 21, 48-A, 51-A(g), 47, 32 and 226; Securities and Exchange Board of India Act, 1992; Death sentence; Arts. 14 and 16; Central Civil Services (Classification, Control and Appeal) Rules, 1965; Hazardous Wastes (Management and Handling) Rules, 1989; Mining lease; Arts. 32 & 21; Posts; Banking Regulation Act, 1949; Wild Life (Protection) Act, 1972; Government Grants and Largesse; Disability Pension; Energy and Power; Forests, Wildlife and Zoos; Age; Compulsory Retirement; Constitution of India, Article 32; Environment (Protection) Rules, 1986; Qualifying service; Environment (Protection) Act, 1986, S. 3; Administrative or executive function; Arts. 21 and 14; Arts. 14, 15 and 16; Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974, S. 3; Ship-breaking; Services; Telecom licence; Animals, Birds and Fish; Communal riots; Family pension; Administrative review; Conditions of service; Scheduled Castes and Scheduled Tribes; Re-employment; Arts. 21 & 32; Resignation; Constitution of India, Arts. 16 and 14; Air Pollution; Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974, S. 3(1); Freedom of speech and expression; Compensatory afforestation; Mining and Industries; Scheduled Castes and Tribes; Trafficking; Constitution of India, Articles 14 and 16; Consumer Protection Act, 1986; Government Contracts; CCS (Pension) Rules, 1972; Pensionary benefits; Service Rules; Vehicular pollution in Delhi; Public Health; Retirement/Superannuation; Right against malnutrition; Working Journalists and Other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955; Right of Children to Free and Compulsory Education Act, 2009; Armed Forces Tribunal Act, 2007; Arts. 21, 14, 15 and 32

Figure 3: Distribution of the index of importance



# **B** Additional results

	(1)	(2)	(3)	(4)	(5)
One retired long before	-0.0659	-0.0336	-0.0616	-0.0792	-0.0385
	(0.0459)	(0.0481)	(0.0431)	(0.0512)	(0.0563)
Both retired long before	-0.104	-0.0665	-0.0972	-0.122	-0.0789
	(0.101)	(0.0926)	(0.0959)	(0.102)	(0.0961)
Importance			-0.0173		-0.00798
			(0.0294)		(0.0284)
Case controls	No	Yes	No	No	Yes
Year dummies	No	No	No	Yes	Yes
Observations	652	652	652	652	652
$R^2$	0.004	0.029	0.005	0.018	0.044
Mean of dep. var.	0.667	0.634	0.661	0.681	0.643

Table 10: Effect of retirement-election distance on decisions.

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. The mean of the dependent variable is the probability that the government wins a case with mean importance when it is decided by a control group bench. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	$-0.346^{***}$	$-0.340^{***}$	$-0.349^{***}$	-0.339***	-0.333***
	(0.0966)	(0.107)	(0.0610)	(0.0993)	(0.103)
One retiring soon	-0.271	-0.280	-0.184	0.00954	0.0740
	(0.176)	(0.197)	(0.129)	(0.286)	(0.314)
Both retiring soon	-0.0268	-0.0411	0.0549	0.368	0.475
	(0.157)	(0.179)	(0.111)	(0.317)	(0.329)
One retired long before	0.146	0.139	0.00268	0.0912	0.0839
$\times$ Importance	(0.139)	(0.137)	(0.132)	(0.143)	(0.137)
Both retired long before	0.345***	0.345***	0.353***	0.337***	0.338***
$\times$ Importance	(0.0818)	(0.0919)	(0.0427)	(0.0816)	(0.0880)
One retired long before	$0.272^{*}$	0.246	0.214	0.213	0.179
$\times$ One retiring soon	(0.143)	(0.155)	(0.133)	(0.156)	(0.170)
One retired long before	0.0451	0.0253	-0.0549	0.0602	0.0388
$\times$ Both retiring soon	(0.0973)	(0.102)	(0.122)	(0.0977)	(0.102)
Both retired long before	0.266	0.245	0.190	0.242	0.209
$\times$ One retiring soon	(0.177)	(0.178)	(0.119)	(0.201)	(0.198)
One retiring soon $\times$	-0.0367	-0.0291	-0.197***	-0.0452	-0.0363
Importance	(0.148)	(0.167)	(0.0434)	(0.149)	(0.156)
Both retiring soon $\times$	0.0553	0.0461	0.0580	0.0605	0.0524
Importance	(0.0795)	(0.0842)	(0.0541)	(0.0779)	(0.0805)
One retired long before	0.186	0.178	$0.456^{***}$	0.242	0.232
$\times$ One retiring soon $\times$ Importance	(0.166)	(0.180)	(0.117)	(0.171)	(0.175)
One retired long before	0.198	0.199	$0.342^{**}$	0.250	0.257
$\times$ Both retiring soon $\times$ Importance	(0.202)	(0.199)	(0.170)	(0.218)	(0.205)
Both retired long before	0.0145	0.00780	0.190***	0.0350	0.0248
$\times$ One retiring soon $\times$ Importance	(0.128)	(0.152)	(0.0472)	(0.132)	(0.146)
One retired long before			-0.0108		
			(0.128)		
Both retired long before			-0.0354		
			(0.0894)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.204	0.217	0.039	0.215	0.230

Table 11: Pandering close to retirement

The variables "One retiring soon" and "Both retiring soon" are indicators for whether one or both judges retire before the next election immediately following the case. Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.0141

	(1)	(2)	(3)	(4)	(5)
One retiring soon	-0.297*	-0.309*	-0.170	-0.0278	0.0257
	(0.173)	(0.168)	(0.189)	(0.262)	(0.284)
Both retiring soon	-0.0303	-0.0427	0.0672	0.352	0.456
Dom roming soon	(0.161)	(0.182)	(0.109)	(0.298)	(0.314)
	× ,	()	× ,	()	()
One retired long before	$0.251^{*}$	0.230	0.124	0.196	0.169
$\times$ One retiring soon	(0.149)	(0.147)	(0.191)	(0.164)	(0.174)
One retired long before	0.000311	-0.0186	-0.147	0.0157	-0.00722
$\times$ Both retiring soon	(0.0869)	(0.0900)	(0.111)	(0.0884)	(0.0922)
Both retired long before	0.292	$0.273^{*}$	0.176	0.268	0.238
$\times$ One retiring soon	(0.187)	(0.159)	(0.183)	(0.199)	(0.189)
One retired long before			-0.0210		
0			(0.100)		
Both retired long before			-0.121		
Doth fettred long before					
			(0.0873)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.189	0.203	0.010	0.201	0.216

Table 12: Effect of retirement characteristics on decisions.

The variables "One retiring soon" and "Both retiring soon" are indicators for whether one or both judges retire before the next election immediately following the case. Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)
One retired long before	$0.247^{**}$	0.125	0.0923
	(0.108)	(0.0871)	(0.0841)
Both retired long before	0.382***	0.239**	0.195***
	(0.142)	(0.104)	(0.0641)
Case controls	No	Yes	Yes
Year dummies	No	No	Yes
Observations	652	652	652
$R^2$	0.011	0.108	0.134

Table 13: Correlation between importance and bench retirement characteristics

Dependent variable is the importance index. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

			er of j			(1)	(2)	(3)	(4)	(5)
	re		betwee	en yea	$\operatorname{rs}$					
l	4–5	3-4	2 - 3	1 - 2	0 - 1					
0	0	0	0	0	2			ase categor	-	
						both	judges retir	ed shortly	before an el	ection
1	0	0	0	1	1	0.203**	$0.210^{**}$	$0.280^{***}$	$0.186^{*}$	$0.194^{*}$
						(0.0938)	(0.0979)	(0.0950)	(0.0986)	(0.103)
2	0	0	0	2	0	$0.213^{**}$	$0.295^{***}$	$0.280^{**}$	$0.211^{*}$	0.311***
						(0.0994)	(0.0981)	(0.136)	(0.121)	(0.114)
3	0	0	1	0	1	$0.207^{***}$	$0.209^{***}$	$0.290^{***}$	$0.192^{***}$	0.200***
						(0.0567)	(0.0683)	(0.0763)	(0.0541)	(0.0628)
4	0	0	1	1	0	$0.361^{***}$	$0.366^{***}$	$0.464^{***}$	$0.352^{***}$	0.360***
						(0.0871)	(0.0984)	(0.0806)	(0.0816)	(0.0898)
5	0	0	2	0	0	0.115	0.116	0.162	0.0476	0.0523
						(0.196)	(0.214)	(0.197)	(0.200)	(0.204)
6	0	1	0	0	1	0.478***	0.497***	0.622***	0.476***	0.490***
						(0.119)	(0.134)	(0.0651)	(0.133)	(0.138)
7	0	1	0	1	0	0.387***	0.404***	0.507***	0.372***	0.387***
						(0.0705)	(0.0842)	(0.0942)	(0.0798)	(0.0999)
8	0	1	1	0	0	0.737***	0.715***	0.431**	0.723***	0.709***
						(0.230)	(0.266)	(0.205)	(0.224)	(0.240)
9	0	2	0	0	0		canr	ot be estim	nated	
10	1	0	0	0	1	0.306***	0.331***	0.299***	0.302***	0.331***
						(0.1000)	(0.0988)	(0.0638)	(0.0879)	(0.0908)
11	1	0	0	1	0	0.241***	0.267***	0.336***	0.232***	0.261***
						(0.0715)	(0.0764)	(0.0950)	(0.0760)	(0.0798)
12	1	0	1	0	0	0.277**	0.293**	0.412***	0.263**	0.282**
						(0.134)	(0.141)	(0.0836)	(0.133)	(0.137)
13	1	1	0	0	0	0.181	0.248	0.204	0.154	0.208
						(0.188)	(0.224)	(0.141)	(0.209)	(0.241)
14	2	0	0	0	0	0.372***	0.400***	0.410***	0.372***	0.404***
						(0.0761)	(0.0828)	(0.0806)	(0.0743)	(0.0804)
Jud	lge du	mmies	3			Yes	Yes	No	Yes	Yes
Cas	se cont	rols				No	No	No	Yes	Yes
	ır dum					No	Yes	No	No	Yes
	servati					652	652	652	652	652
$R^2$						0.220	0.234	0.075	0.230	0.246

Table 14: Disaggregated effects of election-retirement distance

Dependent variable is whether government won. The coefficients reported in the table are the estimates of  $\lambda_{\ell}$ ,  $\ell = 1 \dots 14$ , the coefficients of interactions between importance and the retirement category dummies from eq. (3). We cannot estimate  $\lambda_9$ , the coefficient for both judges retired between 3-4 years of the next election, since there are only two cases in this category. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

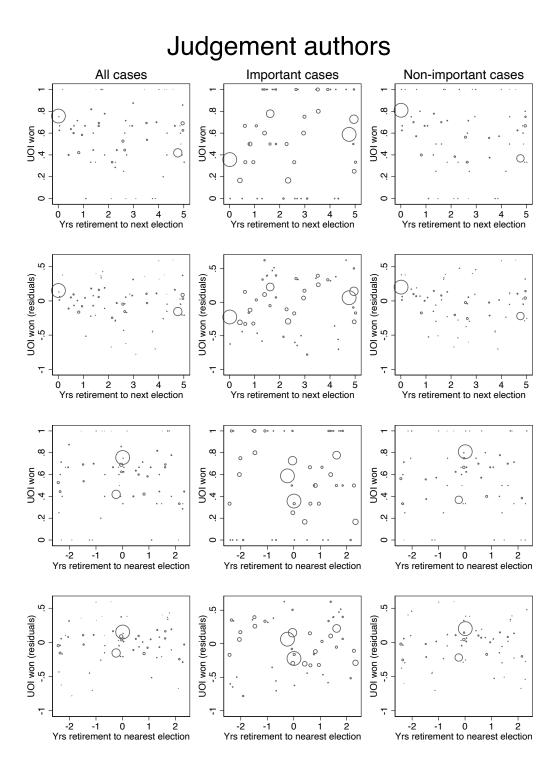


Figure 4: Each circle represents the authored cases of a judge. The first, second and third column plot the fraction of cases decided in favour of UOI for all cases, important and non-important cases, respectively. Importance is divided at the 75th percentile of the index of importance. The first and the third row plot the raw data whereas the second and the fourth row are plots of the residuals from regressing UOI won on year dummies, case controls and importance. In the first two rows the x-axis is the years from a judge's retirement date to the next election. In the last two rows the x-axis is the distance from retirement to the nearest election. Here, judges retiring in the first 2.5 years of a government's tenure take positive values (just as in the earlier plots) while judges retiring in the last 2.5 years of a government's tenure take negative values, with 0 representing retiring on the day of the election.

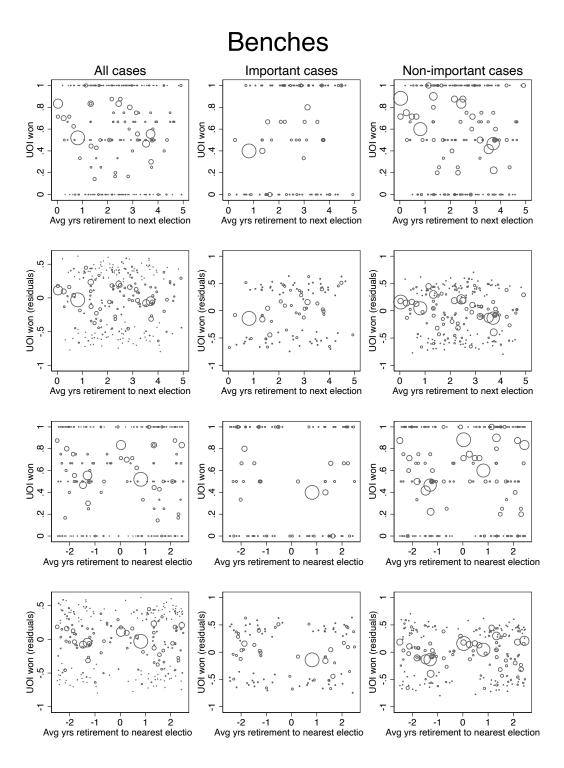


Figure 5: Each circle represents the cases of a bench. The first, second and third column plot the fraction of cases decided in favour of UOI for all cases, important and non-important cases, respectively. Importance is divided at the 75th percentile of the index of importance. The first and the third row plot the raw data whereas the second and the fourth row are plots of the residuals from regressing UOI won on year dummies, case controls and importance. In the first two rows the x-axis is the years from a judge's retirement date to the next election. In the last two rows the x-axis is the average years from retirement to the nearest election. Here, benches where the average judge retires in the first 2.5 years of a government's tenure take positive values (just as in the earlier plots) while benches with average judge retiring in the last 2.5 years of a government's tenure take negative values, with 0 representing retiring on the day of the election.

	AG o	r SG	Senior	· Adv.	Advo	cates
	(1)	(2)	(3)	(4)	(5)	(6)
None retired long before	0.0615					
	(0.0510)					
One retired long before			$-0.155^{***}$		$-0.176^{***}$	
			(0.0271)		(0.0187)	
Both retired long before	-0.0710		-0.222***		$-0.267^{***}$	
	(0.0602)		(0.0614)		(0.0890)	
Attorney or Solicitor General	-0.0718	0.0164				
	(0.125)	(0.185)				
Both retired long before	$0.431^{***}$	$0.308^{*}$				
$\times$ Attorney or Solicitor General	(0.118)	(0.178)				
Number of Senior Advocates			-0.150***	-0.0866		
			(0.0294)	(0.0556)		
One retired long before			$0.122^{***}$	0.0811		
$\times$ Number of Senior Advocates			(0.0257)	(0.0601)		
Both retired long before			$0.146^{***}$	0.0818		
$\times$ Number of Senior Advocates			(0.0302)	(0.0616)		
Number of Advocates					-0.0159***	-0.0141***
					(0.000756)	(0.00499)
One retired long before					$0.0114^{***}$	$0.00961^{**}$
$\times$ Number of Advocates					(0.00249)	(0.00436)
Both retired long before					0.0160***	$0.0139^{**}$
$\times$ Number of Advocates					(0.00220)	(0.00570)
Judge dummies	No	Yes	No	Yes	No	Yes
Case controls	No	Yes	No	Yes	No	Yes
Year dummies	No	Yes	No	Yes	No	Yes
Observations	652	652	652	652	652	652
$R^2$	0.025	0.223	0.015	0.214	0.022	0.224

Table 15: Using different proxies for importance

Dependent variable is whether government won. In columns (1) and (2) the base category is "One judge retired long before" because in our sample there are no cases decided by a bench with both judges retiring shortly before where the Attorney or Solicitor General appeared. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

		UOI	lawyers		All lawyers
	(1)	(2)	(3)	(4)	(5)
Importance	-0.0979	-0.0904	$-0.120^{*}$	-0.0824	-0.0705
	(0.110)	(0.116)	(0.0689)	(0.0876)	(0.0904)
One retired long before	0.0350	0.0268	0.0413	0.0256	0.0147
$\times$ Importance	(0.120)	(0.127)	(0.0785)	(0.102)	(0.105)
Both retired long before	0.132	0.146	$0.131^{*}$	0.130	0.138
$\times$ Importance	(0.135)	(0.138)	(0.0764)	(0.115)	(0.112)
One retired long before			-0.0594		
			(0.0523)		
Both retired long before			-0.131**		
			(0.0560)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	460	460	460	460	460
$R^2$	0.241	0.260	0.029	0.252	0.277

Table 16: UOI lawyers only

Dependent variable is whether government won. Sample composed of only those cases where the importance index is only composed of lawyers appearing for the government. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance (25–50 pctile)	-0.178***	-0.149**	-0.197***	-0.160***	-0.129**
	(0.0479)	(0.0608)	(0.0510)	(0.0503)	(0.0567)
Importance (50–75 pctile)	$-0.257^{*}$	-0.222	$-0.325^{**}$	-0.215	-0.179
	(0.156)	(0.164)	(0.128)	(0.151)	(0.158)
Importance (75th)	-0.441***	-0.456***	-0.578***	-0.412***	-0.427***
	(0.117)	(0.140)	(0.0416)	(0.112)	(0.128)
One retired long before	0.0119	-0.0228	-0.00886	0.00569	-0.0321
$\times$ Importance (25–50 pctile)	(0.108)	(0.116)	(0.114)	(0.107)	(0.112)
Both retired long before	0.0655	0.0381	0.0297	0.0355	0.00939
$\times$ Importance (25–50 pctile)	(0.0734)	(0.0782)	(0.0674)	(0.0729)	(0.0746)
One retired long before	0.211	0.189	0.235***	0.186	0.163
$\times$ Importance (50–75 pctile)	(0.133)	(0.141)	(0.0848)	(0.135)	(0.139)
Both retired long before	0.186	0.167	0.226	0.145	0.130
$\times$ Importance (50–75 pctile)	(0.167)	(0.176)	(0.142)	(0.166)	(0.175)
One retired long before	$0.271^{**}$	$0.279^{**}$	0.336***	$0.250^{**}$	$0.263^{**}$
$\times$ Importance (75th)	(0.107)	(0.118)	(0.0579)	(0.107)	(0.122)
Both retired long before	0.420***	$0.456^{***}$	$0.550^{***}$	0.390***	0.428***
$\times$ Importance (75th)	(0.145)	(0.159)	(0.0462)	(0.144)	(0.152)
One retired long before			-0.140***		
			(0.0219)		
Both retired long before			-0.227***		
-			(0.0490)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.204	0.219	0.041	0.214	0.229

Table 17: Disaggregated effects by quartiles of importance

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Threshold (months)	6	12	18	24	6	12	18	24
Importance	$-0.371^{***}$	-0.306***	-0.323***	$-0.120^{**}$	-0.334***	-0.280***	-0.293***	-0.117***
	(0.0219)	(0.0805)	(0.0456)	(0.0483)	(0.0422)	(0.0620)	(0.0415)	(0.0411)
One retired long before	0.0475 (0.0539)	0.0480 (0.0597)	0.0457 (0.0526)	0.0647 (0.0618)				
One retired long before $\times$ Importance	$0.278^{***}$ (0.0477)	$0.260^{***}$ (0.0835)	$0.299^{***}$ (0.0552)	$0.109^{*}$ (0.0558)	$0.231^{***}$ (0.0570)	$0.234^{***}$ (0.0725)	$0.274^{***}$ (0.0525)	$0.112^{**}$ (0.0450)
Both retired long before $\times$ Importance	$0.383^{***}$ (0.0458)	$0.349^{***}$ (0.0928)	$0.363^{***}$ (0.0700)	$0.163^{**}$ (0.0708)	$0.351^{***}$ (0.0553)	$0.334^{***}$ (0.0853)	$0.337^{***}$ (0.0703)	$0.168^{***}$ (0.0594)
Judge dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Case controls	No	No	No	No	Yes	Yes	Yes	Yes
Year dummies	No	No	No	No	Yes	Yes	Yes	Yes
Observations	652	652	652	652	652	652	652	652
$R^2$	0.201	0.202	0.204	0.198	0.225	0.227	0.226	0.220

Table 18: Different thresholds for retired long before

Dependent variable is whether government won. The column labels indicate the threshold in months at which a judge is considered to have retired long before an election. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)
Importance	-0.154***	-0.152***	-0.0340	-0.0303	-0.188***	-0.182***
	(0.0269)	(0.0288)	(0.0246)	(0.0237)	(0.0506)	(0.0500)
One retired long before	-0.0231		-0.0686*		-0.0917	
	(0.0440)		(0.0352)		(0.0783)	
Both retired long before	-0.0457		-0.119		-0.165	
	(0.0989)		(0.0849)		(0.184)	
One retired long before	0.0690	0.106	0.00122	0.0232	0.0702	0.129
$\times$ Importance	(0.0576)	(0.0647)	(0.0482)	(0.0520)	(0.105)	(0.117)
Both retired long before	0.157***	$0.155^{***}$	0.0580	0.0471	0.215***	0.202**
$\times$ Importance	(0.0387)	(0.0501)	(0.0358)	(0.0490)	(0.0719)	(0.0916)
Judge dummies	No	Yes	No	Yes	No	Yes
Case controls	No	Yes	No	Yes	No	Yes
Year dummies	No	Yes	No	Yes	No	Yes
Observations	681	681	681	681	681	681
$R^2$	0.024	0.221	0.010	0.201	0.014	0.211

Table 19: Including cases with no clear winner

Dependent variable is whether government won, except in columns (5) and (6) where it takes three values: government won (1), government lost (-1), and no clear winner (0). Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

		Lo	ogit			Pr	obit	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Importance	-1.643**	$-2.351^{**}$	-2.626**	-1.692***	-1.026**	-1.439**	-1.601**	-1.021***
	(0.713)	(0.996)	(1.091)	(0.649)	(0.411)	(0.583)	(0.632)	(0.358)
One retired long before	1.462**	2.097**	2.328**	1.493**	0.916**	1.282**	1.416**	0.905**
$\times$ Importance	(0.733)	(1.002)	(1.099)	(0.665)	(0.424)	(0.587)	(0.636)	(0.370)
Both retired long before	1.632**	2.446**	2.698**	1.723***	1.017**	1.495**	1.643***	1.035***
$\times$ Importance	(0.726)	(1.003)	(1.099)	(0.663)	(0.419)	(0.587)	(0.636)	(0.367)
One retired long before		0.475	0.470			0.292	0.294	
		(0.353)	(0.387)			(0.213)	(0.232)	
Both retired long before		0.332	0.318			0.203	0.199	
		(0.343)	(0.371)			(0.207)	(0.222)	
Judge dummies	Yes	No	No	Yes	Yes	No	No	Yes
Case controls	No	Yes	No	Yes	No	Yes	No	Yes
Year dummies	No	No	No	Yes	No	No	No	Yes
Observations $R^2$	633	652	652	630	633	652	652	630

Table 20: Logit and probit

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the bench level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	-0.144	-0.157	-0.215***	-0.142	-0.153
	(0.0915)	(0.0955)	(0.0507)	(0.0930)	(0.0974)
Importance $\times$ Number who	0.0777	0.0865	0.118***	0.0777	0.0853
*					
retired long before	(0.0523)	(0.0564)	(0.0311)	(0.0521)	(0.0539)
Number who retired long before			-0.0273		
			(0, 0.4  FF)		
			(0.0455)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.193	0.208	0.022	0.202	0.218
<i>p</i> -value $H_0: \lambda_2 = 2\lambda_1$	0.056	0.098	0.071	0.069	0.105

Table 21: Constant marginal effects for retired long before

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	-0.318***	-0.291***	-0.375***	-0.272***	-0.281***
	(0.0554)	(0.0583)	(0.0644)	(0.0445)	(0.0472)
At least one retired long	0.135		0.0221		
before	(0.103)		(0.0548)		
At least one retired long	0.309***	0.283***	0.365***	0.265***	0.276***
before $\times$ Importance	(0.0690)	(0.0764)	(0.0763)	(0.0628)	(0.0669)
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.196	0.208	0.017	0.203	0.218

Table 22: At least one retired long before

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	-0.320***	$-0.321^{***}$	-0.387***	-0.303***	-0.302***
	(0.0506)	(0.0532)	(0.0681)	(0.0503)	(0.0524)
One retired long before	$0.276^{***}$	$0.276^{***}$	$0.315^{***}$	$0.259^{***}$	$0.261^{***}$
$\times$ Importance	(0.0658)	(0.0726)	(0.0886)	(0.0689)	(0.0701)
Both retired long before	0.332***	0.334***	0.398***	0.320***	0.320***
$\times$ Importance	(0.0699)	(0.0751)	(0.0726)	(0.0691)	(0.0689)
One retired long before			$0.0543^{*}$		
			(0.0304)		
Both retired long before			-0.00738		
			(0.0605)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	772	772	772	772	772
$R^2$	0.204	0.218	0.023	0.212	0.227
Mean of dep. var.	0.589	0.588	0.572	0.589	0.589
<i>p</i> -value $H_0: \lambda_1 = \lambda_2$	0.394	0.402	0.103	0.371	0.380
<i>p</i> -value $H_0^1: \beta + \lambda_1 = 0$	0.461	0.469	0.102	0.464	0.514
<i>p</i> -value $H_0^2$ : $\beta + \lambda_2 = 0$	0.751	0.730	0.673	0.692	0.666

Table 23: Including cases decided by judges that retired after 2014

In this table we include all cases decided in our sample period even if one of the judges on the bench retires after 2014. The average times from retirement to post-SC job, conditional on being appointed to one in this sample is 0.814 years and we therefore use this as the threshold for classifying judges as retiring long or shortly before an election. Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	-0.274***	-0.283***	-0.375***	-0.272***	-0.281***
	(0.0525)	(0.0554)	(0.0652)	(0.0466)	(0.0451)
One retired long before	0.236***	0.240***	$0.305^{***}$	$0.232^{***}$	$0.238^{***}$
$\times$ Importance	(0.0685)	(0.0780)	(0.0857)	(0.0683)	(0.0753)
Both retired long before	0.282***	0.297***	0.394***	0.282***	0.295***
$\times$ Importance	(0.0760)	(0.0842)	(0.0707)	(0.0710)	(0.0719)
× importance	(0.0700)	(0.0642)	(0.0707)	(0.0710)	(0.0719)
One retired long before			0.0466		
			(0.0405)		
Both retired long before			-0.00607		
			(0.0780)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
	-	-	-		
Year dummies	No	Yes	No	No	Yes
Observations	629	629	629	629	629
$R^2$	0.197	0.211	0.027	0.205	0.220
Mean of dep. var.	0.571	0.570	0.550	0.571	0.570

Table 24: Excluding the cases decided by Dalveer Bhandari

Justice Dalveer Bhandari is the only judge in our sample who voluntarily retired before his mandated retirement date. He retired once he was elected to the International Court of Justice, six months before his 65th birthday. Here we exclude all his cases. Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table 25: Bench hunting

		75th	pctile	AG	or SG
	(1)	(2)	(3)	(4)	(5)
Panel A: controlling for tenu	re				
Fraction of cases, UOI won	3.116				
	(9.905)				
Fraction of cases, UOI won,		1.196		1.066	
salient		(1.291)		(0.798)	
Fraction of cases, UOI won,			1.763		1.420
salient, author			(2.231)		(1.173)
Tenure	4.555***	4.501***	4.526***	4.066***	4.182***
	(1.297)	(1.283)	(1.285)	(1.318)	(1.306)
Observations	72	72	72	72	72
$R^2$	0.152	0.161	0.158	0.172	0.168
Panel B: controlling for tenu	re and ret	irement ch	aracteristic	s	
Fraction of cases, UOI won	4.979				
	(9.826)				
Fraction of cases, UOI won,		0.841		0.948	
salient		(1.299)		(0.818)	
Fraction of cases, UOI won,			1.541		1.240
salient, author			(2.221)		(1.201)
Tenure	6.562***	6.335***	6.374***	6.153***	6.293***
	(1.677)	(1.674)	(1.666)	(1.672)	(1.662)
Retired long before an	-7.577	-7.558	-7.769	-6.701	-6.561
election	(4.932)	(4.924)	(4.936)	(4.938)	(4.984)
Observations	72	72	72	72	72
$R^2$	0.250	0.252	0.253	0.263	0.260

Dependent variable is the total number of cases decided by a judge. In columns (2) - (3) important cases are those in the top 25 percent of the importance index and in columns (4) - (5) they are those where either the Attorney or the Solicitor General represented the government. Regressions in Panel B also control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)
	0	1	2	1-0	2-0	2 - 1
Appeal (1) Petition (0)	0.926***	0.843**	0.829**	-0.0832	-0.0974*	-0.0142
	(0.264)	(0.365)	(0.377)	(0.0524)	(0.0533)	(0.0309)
UOI appellant/petitioner (1) Respondent (0)	0.574	0.444	0.351	-0.131*	-0.223***	-0.0921**
	(0.499)	(0.498)	(0.478)	(0.0748)	(0.0703)	(0.0404)
CJI present in case	0.0185	0.0242	0.0143	0.00568	-0.00423	-0.00991
	(0.136)	(0.154)	(0.119)	(0.0227)	(0.0177)	(0.0112)
Senior judge's remaining tenure	2.128**	1.511	1.509	-0.617***	-0.619***	-0.00157
	(1.059)	(1.097)	(1.079)	(0.164)	(0.157)	(0.0902)
Junior judge's remaining tenure	$3.742^{*}$	4.108***	3.842**	0.367	0.1000	-0.267**
	(1.953)	(1.484)	(1.711)	(0.237)	(0.255)	(0.135)
Years from decision to election	2.422**	$2.162^{*}$	$2.475^{*}$	-0.260	0.0534	0.314***
	(1.167)	(1.302)	(1.392)	(0.192)	(0.199)	(0.112)
Number of Attorneys General	0	0.00806	0.0400	0.00806	0.0400	0.0319**
	(0)	(0.0896)	(0.196)	(0.0122)	(0.0267)	(0.0134)
Number of Solicitors General	0	0.0524	0.0400	$0.0524^{*}$	0.0400	-0.0124
	(0)	(0.223)	(0.196)	(0.0304)	(0.0267)	(0.0173)
Number of Senior Advocates	0.833	1.302	1.594	0.469**	$0.761^{**}$	$0.292^{*}$
	(1.005)	(1.677)	(2.143)	(0.237)	(0.297)	(0.163)
Number of Advocates	10.20	11.43	12.55	1.228	2.351	1.123
	(11.91)	(14.29)	(17.03)	(2.087)	(2.404)	(1.324)
Importance	-0.293	-0.0458	0.0894	0.247**	0.382**	0.135
	(0.548)	(0.885)	(1.170)	(0.125)	(0.162)	(0.0881)
Observations	54	248	350	302	404	598

 Table 26: Sample balance

Unit of observation is the case. Columns (1)–(3) report the means of the variables for benches with zero, one and two judges retiring long before an election. Columns (4)–(5) report the difference between such benches. Standard errors in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)	(6)
Importance	$-0.311^{*}$	-0.280	-0.486***	-0.322**	$-0.296^{*}$	-0.186
	(0.165)	(0.173)	(0.169)	(0.159)	(0.167)	(0.115)
One retired long before	0.284	0.247	0.359**	0.285	0.248	0.184
$\times$ Importance	(0.196)	(0.204)	(0.175)	(0.191)	(0.193)	(0.137)
Both retired long before	0.262	0.232	0.408***	0.277	0.243	0.183
$\times$ Importance	(0.189)	(0.198)	(0.150)	(0.179)	(0.182)	(0.123)
UOI won in lower court	-0.171**	-0.180**	-0.180***	$-0.174^{*}$	$-0.175^{*}$	
	(0.0711)	(0.0839)	(0.0629)	(0.0969)	(0.0931)	
UOI won in lower court	0.0485	0.0532	0.0905	0.0451	0.0559	
$\times$ Importance	(0.0770)	(0.0833)	(0.0658)	(0.0770)	(0.0853)	
One retired long before	$0.138^{*}$	0.120	0.0952	0.130	0.113	
$\times$ UOI won in lower court	(0.0801)	(0.0884)	(0.0993)	(0.0853)	(0.0914)	
One retired long before			0.0364			
			(0.128)			
Both retired long before			0.0392			
			(0.157)			
Both retired long before			0.0469			
$\times$ UOI won in lower court			(0.0667)			
Judge dummies	Yes	Yes	No	Yes	Yes	Yes
Case controls	No	No	No	Yes	Yes	Yes
Year dummies	No	Yes	No	No	Yes	Yes
Observations	549	549	549	549	549	549
$\mathbb{R}^2$	0.246	0.258	0.044	0.249	0.260	0.257

Table 27: Controlling for the lower court's decision in appeals

Dependent variable is whether government won. The sample is composed only of appeals. Case controls are whether CJI was one of the judges, the tenures of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
UOI won	0.484	0.464	0.115	0.500	0.485
	(0.473)	(0.494)	(0.757)	(0.559)	(0.538)
Importance	-0.140	-0.126	0.321	-0.270	-0.339
	(0.308)	(0.339)	(0.589)	(0.318)	(0.390)
UOI won $\times$ Importance	-2.474*	-2.459*	-1.893	-2.570*	-2.482*
	(1.390)	(1.431)	(1.853)	(1.417)	(1.492)
UOI won $\times$ One retired	-0.334	-0.251	-0.223	-0.291	-0.252
long before	(0.477)	(0.484)	(0.806)	(0.520)	(0.534)
One retired long before	0.732	0.760	0.0604	0.772	0.844
$\times$ Importance	(0.640)	(0.640)	(0.960)	(0.616)	(0.595)
Both retired long before	-0.278	-0.251	-0.386	-0.151	-0.0448
$\times$ Importance	(0.323)	(0.346)	(0.601)	(0.356)	(0.391)
UOI won $\times$ One retired	1.536	1.521	1.145	1.701	1.583
long before $\times$ Importance	(1.542)	(1.562)	(1.933)	(1.543)	(1.562)
UOI won $\times$ Both retired	2.808**	$2.738^{*}$	1.835	2.864**	$2.691^{*}$
long before $\times$ Importance	(1.414)	(1.448)	(1.860)	(1.445)	(1.505)
One retired long before			0.403		
			(0.384)		
Both retired long before			0.447		
			(0.828)		
UOI won $\times$ Both retired			-0.0800		
long before			(0.828)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.231	0.254	0.010	0.237	0.260
Mean of dep. var.	2.108	2.124	2.145	2.080	2.108

Table 28: Pandering incentives and delay or hastening

Dependent variable is the time from the year the case was filed to the date the case was decided. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)
Retired long before an	-0.293*	-0.264	-0.245	-0.229
election	(0.171)	(0.170)	(0.164)	(0.168)
Tenure		0.0654	-0.0113	-0.00884
		(0.0410)	(0.0497)	(0.0522)
Constant	0.753***	0.397	0.686**	0.547
	(0.154)	(0.270)	(0.284)	(0.454)
Observations	72	72	72	72
$R^2$	0.040	0.075	0.154	0.162

Table 29: Signalling and retirement-election distance

Dependent variable is the number of news articles in Factiva mentioning a judge during his SC tenure divided by the length of tenure. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	(1)	(2)	(3)	(4)	(5)
Importance	-0.135	-0.148	-0.215***	-0.134	-0.144
	(0.0888)	(0.0921)	(0.0611)	(0.0909)	(0.0932)
Importance $\times$ Senior	$0.0996^{*}$	0.107**	0.117***	0.100**	0.108**
retired long before	(0.0513)	(0.0529)	(0.0281)	(0.0472)	(0.0480)
Senior retired long before			-0.0373		
			(0.0615)		
Importance $\times$ Junior	0.0474	0.0576	$0.120^{*}$	0.0472	0.0545
retired long before	(0.0784)	(0.0818)	(0.0613)	(0.0834)	(0.0850)
Junior retired long before			-0.0146		
			(0.0404)		
Judge dummies	Yes	Yes	No	Yes	Yes
Case controls	No	No	No	Yes	Yes
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.193	0.208	0.022	0.203	0.219
<i>p</i> -value $H_0: \lambda_S = \lambda_J$	0.541	0.554	0.965	0.550	0.555

Table 30: Disaggregated effects of pandering incentives based on judge seniority

Dependent variable is whether government won. Case controls are type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, days from case to next election, the tenures left of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

		Median in	nportance		AG or SG				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Number of cases, UOI won,	0.00461	0.00579	0.00472	0.0111	$0.145^{***}$	$0.133^{**}$	$0.174^{***}$	0.180***	
important, author	(0.0169)	(0.0142)	(0.0337)	(0.0354)	(0.0503)	(0.0512)	(0.0649)	(0.0670)	
Number of cases, UOI won,				0.0154				-0.000448	
important, non-author				(0.0354)				(0.102)	
important, non-author				(0.0304)				(0.102)	
Number of cases, UOI lost,				-0.00747				0.0405	
important				(0.0311)				(0.101)	
								· · · ·	
Years from retirement to next		0.0549	0.0559	0.0530		0.0431	0.0368	0.0379	
election		(0.0358)	(0.0377)	(0.0386)		(0.0357)	(0.0366)	(0.0378)	
Tenure			0.0467	0.0447			0.0662	0.0659	
Tenute									
			(0.0817)	(0.0846)			(0.0795)	(0.0803)	
Number of cases relevant to			-0.00709	-0.00666			-0.0151	-0.0163	
post-SC jobs			(0.0168)	(0.0181)			(0.0126)	(0.0128)	
1 0								( )	
Productivity			0.0376	0.0312			0.0617	0.0630	
			(0.0725)	(0.0734)			(0.0675)	(0.0661)	
Constant	0.326	0.223	-0.0402	-0.0586	0.333	0.254	-0.0394	-0.0341	
Constant									
	(0.290)	(0.288)	(0.522)	(0.522)	(0.284)	(0.284)	(0.519)	(0.551)	
Observations	72	72	72	72	72	72	72	72	
$R^2$	0.026	0.056	0.064	0.068	0.088	0.107	0.128	0.130	

Table 31: Rewards for pandering (OLS) with continuous retirement-election distance

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (4) the number of important cases is measured by the number of cases above the median in the importance index and in columns (5) - (8) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	Median importance			AG or SG		
	(1)	(2)	(3)	(4)	(5)	(6)
Number of cases, UOI won,	-0.0106	-0.0170	-0.0125	0.130	0.180	0.196
important, author	(0.00970)	(0.0334)	(0.0345)	(0.158)	(0.152)	(0.162)
Number of cases, UOI won,			0.0145			-0.000224
important, non-author			(0.0329)			(0.103)
Number of cases, UOI lost,			-0.0182			0.0425
important			(0.0327)			(0.104)
Years from retirement to next	0.0244	0.0247	0.0156	0.0427	0.0374	0.0399
election	(0.0437)	(0.0451)	(0.0469)	(0.0389)	(0.0402)	(0.0425)
Years from retirement to next election $\times$	$0.00831^{*}$	$0.00857^{*}$	$0.0100^{*}$	0.000949	-0.00142	-0.00432
Number of cases, UOI won, important, author	(0.00473)	(0.00473)	(0.00544)	(0.0348)	(0.0307)	(0.0326)
Tenure		0.0458	0.0505		0.0659	0.0652
		(0.0810)	(0.0833)		(0.0806)	(0.0815)
Number of cases relevant to		-0.00402	-0.00141		-0.0152	-0.0165
post-SC jobs		(0.0166)	(0.0181)		(0.0127)	(0.0130)
Productivity		0.0257	0.0172		0.0618	0.0634
-		(0.0741)	(0.0762)		(0.0680)	(0.0666)
Constant	0.293	0.0344	0.0200	0.255	-0.0391	-0.0333
	(0.294)	(0.530)	(0.533)	(0.287)	(0.524)	(0.555)
Observations	72	72	72	72	72	72
$R^2$	0.074	0.082	0.091	0.107	0.128	0.130

Table 32: Rewards for p	pandering: Time	gradient
-------------------------	-----------------	----------

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (3) the number of important cases is measured by the number of cases above the median in the importance index and in columns (4) - (6) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	Median importance				AG or SG			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of cases, UOI won,	0.0197	0.0478	0.0152	0.0435	0.710**	$0.667^{**}$	$0.871^{**}$	$0.917^{**}$
important, author	(0.0677)	(0.0618)	(0.143)	(0.150)	(0.301)	(0.292)	(0.380)	(0.379)
Number of cases, UOI won,				0.0689				-0.0430
important, non-author				(0.152)				(0.438)
Number of cases, UOI lost,				-0.0332				0.251
important				(0.139)				(0.422)
Retired long before an		1.512	$1.558^{*}$	1.520		1.274	1.063	1.072
election		(0.933)	(0.936)	(0.954)		(0.859)	(0.862)	(0.882)
Tenure			0.185	0.170			0.327	0.328
			(0.327)	(0.326)			(0.348)	(0.346)
Number of cases relevant to			-0.0189	-0.0155			-0.0747	-0.0806
post-SC jobs			(0.0678)	(0.0756)			(0.0578)	(0.0579)
Productivity			0.138	0.101			0.311	0.308
č			(0.289)	(0.304)			(0.284)	(0.276)
Constant	-0.726	-2.287	-3.461	-3.490	-0.693	-1.967	-3.308	-3.213
	(1.258)	(1.615)	(2.286)	(2.229)	(1.234)	(1.503)	(2.421)	(2.501)
Observations	70	70	70	70	70	70	70	70

Table 33: Rewards for pandering (Logit)

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (4) the number of important cases is measured by the number of cases above the median in the importance index and in columns (5) - (8) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	Median importance				AG or SG			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Number of cases, UOI won,	0.0123	0.0275	0.00718	0.0260	0.441**	$0.421^{**}$	$0.551^{**}$	$0.578^{**}$
important, author	(0.0417)	(0.0390)	(0.0877)	(0.0919)	(0.181)	(0.178)	(0.230)	(0.230)
Number of cases, UOI won,				0.0484				-0.0258
important, non-author				(0.0921)				(0.258)
Number of cases, UOI lost,				-0.0148				0.148
important				(0.0790)				(0.266)
Retired long before an		$0.875^{*}$	$0.915^{*}$	$0.891^{*}$		0.761	0.639	0.638
election		(0.493)	(0.498)	(0.491)		(0.473)	(0.493)	(0.497)
Tenure			0.118	0.107			0.202	0.203
			(0.191)	(0.196)			(0.196)	(0.194)
Number of cases relevant to			-0.0116	-0.0112			-0.0466	-0.0502
post-SC jobs			(0.0422)	(0.0453)			(0.0347)	(0.0354)
Productivity			0.0839	0.0614			0.192	0.190
·			(0.179)	(0.186)			(0.174)	(0.171)
Constant	-0.449	-1.347	-2.100	-2.140	-0.431	-1.192	-2.015	-1.947
	(0.764)	(0.926)	(1.349)	(1.331)	(0.754)	(0.890)	(1.386)	(1.436)
Observations	70	70	70	70	70	70	70	70

Table 34: Rewards for pandering (Probit)

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (4) the number of important cases is measured by the number of cases above the median in the importance index and in columns (5) - (8) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

	Mee	dian importa	ance		AG or SG		
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A: OLS							
Number of cases, UOI won,	0.00461	0.00579	0.00472	$0.145^{***}$	$0.133^{**}$	$0.174^{***}$	
important, author	(0.0169)	(0.0142)	(0.0337)	(0.0503)	(0.0512)	(0.0649)	
Panel B: Second stage							
Number of cases, UOI won,	0.0248	0.0235	0.137	$0.178^{***}$	$0.179^{***}$	$0.256^{***}$	
author	(0.0229)	(0.0202)	(0.176)	(0.0498)	(0.0512)	(0.0735)	
Years from retirement to next		0.0571	0.0409		0.0393	0.0277	
election		(0.0347)	(0.0423)		(0.0344)	(0.0350)	
Constant	0.292	0.189	0.0289	0.333	0.261	-0.0379	
	(0.291)	(0.284)	(0.554)	(0.272)	(0.270)	(0.484)	
Panel C: First stage				. ,		. ,	
Number of cases $\times$	$0.0916^{***}$	$0.0919^{***}$	0.0173	$0.129^{***}$	$0.129^{***}$	$0.112^{***}$	
Retired long before	(0.00564)	(0.00661)	(0.0148)	(0.0148)	(0.0130)	(0.0193)	
Years from retirement to next		-0.170	0.0811		$0.0847^{*}$	$0.0965^{***}$	
election		(0.365)	(0.154)		(0.0455)	(0.0367)	
Constant	1.696	$2.009^{*}$	0.136	-0.0218	-0.178	-0.177	
	(1.059)	(1.219)	(1.646)	(0.167)	(0.175)	(0.388)	
Panel D: Reduced form							
Number of cases $\times$	0.00227	0.00216	0.00237	$0.0231^{***}$	$0.0232^{***}$	$0.0286^{***}$	
Retired long before	(0.00221)	(0.00199)	(0.00249)	(0.00747)	(0.00737)	(0.00875)	
Years from retirement to next		0.0531	0.0520		0.0545	0.0523	
election		(0.0353)	(0.0374)		(0.0334)	(0.0343)	
Constant	0.334	0.236	0.0475	0.329	0.229	-0.0832	
	(0.280)	(0.277)	(0.526)	(0.314)	(0.310)	(0.527)	
Experience controls	No	No	Yes	No	No	Yes	
Observations	72	72	72	72	72	72	
$R^2$	0.002	0.038	-0.170	0.085	0.101	0.114	
First-stage $F$	263.9	193.3	1.364	76.14	99.68	33.66	
Hausman test $p$ -value	0.363	0.344	0.412	0.535	0.372	0.271	

Table 35: Rewards for pandering (2SLS) with continuous retirement-election distance

Dependent variable is 1 if the judge obtained post-SC job from the government that was in power when he retired. In columns (1) - (3) the number of important cases is measured by the number of cases above median in the importance index and in columns (4) - (6) it is the cases where either the Attorney or the Solicitor General represented the government. All regressions control for whether the judge was ever the CJI and a set of dummies for indicating the judge's religion. The three experience controls are tenure, number of job-related cases and productivity. Robust standard errors reported in the parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

# C Litigant response

#### C.1 Case allocation

The key to our identification strategy stated above is that the two-judge bench cases, which constitute our sample, were randomly allocated to benches. As stated in section 2.1, this is the Supreme Court's stated policy and is confirmed by practitioners. Nevertheless, one may be concerned that benches were allocated in a non-random way for some cases in our sample.

We first note that computerised random allocation of cases is a sufficient but not a necessary condition for the soundness of our identification strategy. Even if the allocation of cases was made in a non-random way, this will not introduce bias in our framework unless the merits of a case are correlated with the interaction of its importance and the retirement characteristics of the bench.

Nevertheless, we test for "bench hunting" by regressing the number of cases decided by a judge on the fraction of cases he decided in favour of the government. These results are reported in table 25 in appendix B. We find that the only judge characteristic that predicts the number of cases is tenure on the SC.

Next, we investigate whether observed covariates differ by the number of judges retiring long before an election. The results of tests of such differences are reported in table 26. As seen in table 3 where we observe that the effect of incentives is monotonically increasing in the number of judges retiring long before, most observed case characteristics do not appear to vary monotonically in the same way. Nonetheless, there are some differences across the three groups. For example, we find that the the number of cases where the government is the respondent (rather than the appellant or petitioner), appears to increase as the number of judges retiring long before an election increases. To account for these differences, we control for these variables in all our regressions. In section 5.2.2 we tested the robustness of our results to controlling for interactions of these variables with importance or retirement characteristics.

### C.2 Endogenous litigant response

We have seen that treatment group benches tend to favour the government in important cases. This leads to the question of whether litigants are aware of this and alter their behaviour in response. The government may choose litigation effort after observing the characteristics of the bench deciding the case. Consequently, it is possible that the government invests more in cases that are allocated to benches with more judges retiring long before since such benches are more receptive to such effort. However, table 13 in appendix B shows that after controlling for case characteristics, this difference is only significant at the 10% level for cases decided by benches with one judge retiring long before and insignificant for cases decided by benches with both judges retiring long before. Moreover, contrary to the monotonicity of the effect of pandering incentives established in table 3, we find no such monotonicity in the effect of retirement characteristics on importance.

Nevertheless, suppose such a response exists. Then our importance index captures *ex-post* importance, i.e., the *effort* exerted by the government which ultimately may be determined by the retirement characteristics of the bench and *ex-ante* importance, i.e., the *value* of the case to the government. We can represent this relationship as

$$importance_{ik} = \zeta_1 one \ retired \ long \ before_k + \zeta_2 both \ retired \ long \ before_k + \xi_1 \ importance_i^{exante} \times one \ retired \ long \ before_k + \xi_2 \ importance_i^{exante} \times both \ retired \ long \ before_k + importance_i^{exante},$$
(6)

where  $importance_{ik}$  is ex-post importance measured by our importance index and  $importance_i^{exante}$  is ex-ante importance. In our data, we observe  $importance_{ik}$  while  $importance_i^{exante}$  is unobservable. The equation allows for the possibility that the government exerts more effort not only when  $importance_i^{exante}$  is high but also when the judges deciding the case retire long before an election, which is represented by a non-zero  $\xi_i$ .

In subsection C.2.1 which follows, we show that the effects of the interaction of ex-ante importance and bench retirement characteristics are

$$\frac{\partial won_{ikt}}{\partial importance_i^{exante}}\bigg|_{r=1} - \frac{\partial won_{ikt}}{\partial importance_i^{exante}}\bigg|_{r=0} = \xi_1(\beta + \lambda_1) + \lambda_1 \tag{7}$$

and

$$\frac{\partial won_{ikt}}{\partial importance_i^{exante}}\bigg|_{r=2} - \frac{\partial won_{ikt}}{\partial importance_i^{exante}}\bigg|_{r=0} = \xi_2(\beta + \lambda_2) + \lambda_2, \tag{8}$$

where  $r \in \{0, 1, 2\}$  is the number of judges retiring long before.

In this expanded framework, there could be a difference between the effect of the interaction of ex-post importance with bench retirement characteristics on the one hand and the effect of the interaction of ex-ante importance with bench retirement characteristics on the other, with the difference being the term  $\xi_i(\beta + \lambda_i)$ . In this expression,  $\xi_i\beta$  represents the indirect effect of the interaction of bench retirement characteristics with *ex-ante* importance on the probability of deciding in favour of the government through *ex-post* importance only. On the other hand,  $\xi_i\lambda_i$  represents the indirect effect of the interaction of bench retirement characteristics with *ex-ante* importance on the probability of deciding in favour of the government through the interaction of bench retirement characteristics with *ex-post* importance. Note that  $\zeta_i$  does not appear in expressions eqs. (7) and (8), and therefore  $\zeta_i \neq 0$  has no effect on the difference between the effects of *ex-post* and *ex-ante* importance.

In principle, these two indirect effects could amplify or diminish the direct effect captured by  $\lambda_i$ . However, in the special case when  $\beta + \lambda_i = 0$ , the indirect effects cancel out leaving only the direct effect. Our estimates of  $\beta$ , which capture the effect of *ex-post* importance alone, are consistently negative whereas the estimates of  $\lambda_i$ , which capture the effect of the interaction *ex-post* importance with bench retirement characteristics, are consistently positive. We therefore test whether  $\beta + \lambda_i = 0$ . In table 3 we test the null hypotheses  $H_0^1: \beta + \lambda_1 = 0$  and  $H_0^2: \beta + \lambda_2 = 0$ . We fail to reject  $H_0^1$  and  $H_0^2$  at 10% when we include judge dummies.

Nevertheless,  $\beta + \lambda_i$  could be different from zero so that  $\lambda_i + \xi_i(\beta + \lambda_i)$ , the effect of *ex-ante* importance and bench characteristics, is not the same as  $\lambda_i$ , the effect of *ex-post* importance and bench characteristics. We construct the 95% confidence interval for  $\beta + \lambda_i$  to find the values of  $\xi_i$  such that the ex-ante effect is non-positive despite the ex-post effect being positive. Using the estimates from column (5) in table 3, the confidence interval for  $\beta + \lambda_1$  is [-0.165, 0.079] and for  $\beta + \lambda_2$  is [-0.080,0.104]. Using these and our estimates of  $\lambda_1 = 0.244$  and  $\lambda_2 = 0.299$  from the same specification, for  $\lambda_i + \xi_i(\beta + \lambda_i)$  to be non-positive,  $\xi_i$  would have to satisfy

$$\xi_1 \le -3.087$$
 or  $\xi_1 \ge 1.479$   
 $\xi_2 \le -2.875$  or  $\xi_2 \ge 3.738$ 

This shows that the values of  $\xi_i$  for which the ex-ante effect would be non-positive are an order of magnitude larger than our estimates of  $\lambda_i$ .

One final consideration is that in addition to ex-ante importance and bench retirement characteristics, ex-post importance may also be determined by the merits of the case. This may induce correlation between the interaction of importance and retirement characteristics with the error term. As mentioned in the discussion of table 27 in section 5.2.4 we attempt to address this concern by constructing a proxy for merits and controlling for it along with its interactions with the two dimensions of pandering incentives and we find that the estimates of  $\lambda_1$  and  $\lambda_2$  remain positive.

#### C.2.1 Modelling endogenous litigant response

Let ex-post importance follow eq. (6), that is,

$$importance_{ik} = \zeta_1 I_{1k} + \zeta_2 I_{2k} + \xi_1 v_i \times I_{1k} + \xi_2 v_i \times I_{2k} + v_i, \tag{9}$$

where, for brevity, we denote ex-ante importance by  $v_i$ . Let  $r \in \{0, 1, 2\}$  be the number of judges on the bench retiring long before. Similarly, we rename the variable both retired long before<sub>k</sub> as  $I_{rk}$  with r = 2 and one retired long before<sub>k</sub> as  $I_{rk}$  with r = 1. Ex-ante importance  $v_i$  is idiosyncratic across cases and unobserved. There is no loss of generality<sup>39</sup> in setting the coefficient on  $v_i$  to 1. Since it is an indicator variable  $I_{rk} = I_{rk}^2$ . Moreover, the interaction of  $I_{1k}$  and  $I_{2k}$ , is always zero since each indicator is active only when the other is inactive.

<sup>&</sup>lt;sup>39</sup>Were  $v_i$  to appear with a positive multiplicative constant  $\phi$ , we could simply rescale and define  $\frac{v_i}{\phi}$  as ex-ante importance so that  $importance_{ik} = \zeta_1 I_{1k} + \zeta_2 I_{2k} + \tilde{\xi}_1 v_i \times I_{1k} + \tilde{\xi}_2 v_i \times I_{2k} + v_i$  where  $\tilde{\xi} = \frac{\xi}{\phi}$ .

Hence eq. (2) can be rewritten as

$$won_{ik} = \alpha_0 + \sum_j \alpha_j b_{jk} + \sum_t \delta_t y_{it} + \beta v_i + (\beta \zeta_1 + \lambda_1 \zeta_1) I_{1k} + (\beta \zeta_2 + \lambda_2 \zeta_2) I_{2k} + (\beta \xi_1 + \lambda_1 \xi_1 + \lambda_1) v_i \times I_{1k} + (\beta \xi_2 + \lambda_2 \xi_2 + \lambda_2) v_i \times I_{2k} + (\lambda_1 \zeta_2 + \lambda_2 \zeta_1) I_{1k} \times I_{2k} + (\lambda_1 \xi_2 + \lambda_2 \xi_1) v_i \times I_{1k} \times I_{2k} + \mathbf{X}'_{ik} \eta + \varepsilon_{ik} = \alpha_0 + \sum_j \alpha_j b_{jk} + \sum_t \delta_t y_{it} + \beta v_i + (\beta \zeta_1 + \lambda_1 \zeta_1) I_{1k} + (\beta \zeta_2 + \lambda_2 \zeta_2) I_{2k} + (\beta \xi_1 + \lambda_1 \xi_1 + \lambda_1) v_i \times I_{1k} + (\beta \xi_2 + \lambda_2 \xi_2 + \lambda_2) v_i \times I_{2k} + \mathbf{X}'_{ik} \eta + \varepsilon_{ik} = \alpha_0 + \sum_j \alpha_j b_{jk} + \sum_t \delta_t y_{it} + \beta v_i + (\beta \xi_1 + \lambda_1 \xi_1 + \lambda_1) v_i \times I_{1k} + (\beta \xi_2 + \lambda_2 \xi_2 + \lambda_2) v_i \times I_{2k} + \mathbf{X}'_{ik} \eta + \varepsilon_{ik}$$
(10)

where the standalone effects of  $I_{1k}$  and  $I_{2k}$  are absorbed in the judge dummies, since retirement characteristics are fixed for a judge over his tenure.

Using (10), we can recover the change in the probability of winning as we change the ex-ante importance and the bench retirement characteristics:

$$\frac{\partial won_{ik}}{\partial v_i}|_{r=1} - \frac{\partial won_{ik}}{\partial v_i}|_{r=0} = \xi_1(\beta + \lambda_1) + \lambda_1$$

and similarly

$$\frac{\partial won_{ik}}{\partial v_i}|_{r=2} - \frac{\partial won_{ik}}{\partial v_i}|_{r=0} = \xi_2(\beta + \lambda_2) + \lambda_2.$$

#### C.3 Settlement of cases

A key concern with the literature on published judgements is selection bias – judgements may not be a representative sample of all cases since a significant fraction of cases are actually settled before they are decided by the court. In fact, there may be differences in the likelihood of out-of-court settlement between cases assigned to "treatment" and "control" benches. This point is discussed extensively in Ashenfelter, Eisenberg, and Schwab (1995), who point out that random allocation of cases to judges means that any differences in the probability of the government winning a case must be due to differences in judicial behaviour rather than unobservable case characteristics. As such, the observed differences reflect the effect of pandering incentives on judicial decisions.

# D Additional robustness checks

#### D.1 Cases with no clear winner

In our data collection interface, we gave three options for coding the outcome of a case: government won, government lost, and winner not identifiable. The last option was to allow for cases where it was not clear if the government won or lost. This could happen when, for example, some of the points in dispute in a case were decided in favour of the government but others were decided against the government. There were some cases where the outcome of a case was coded as not identifiable, and as described in section 3.1, these were dropped from our analysis.

We now include these cases and code them in different ways to see whether our results are robust to their inclusion. Results are reported in table 19 in appendix B. In columns (1) and (2) we include these cases among the ones that the government lost. In columns (3) and (4) we do the opposite and include these cases among the ones that the government won. Finally in columns (5) and (6), to allow for the possibility that the decision in these cases was partly in favour of the government and partly against it, we construct a dependent variable that takes value 1 for the cases where the government won, -1 for the cases where the government lost, and 0 for these cases where the winner was not identifiable. The estimates of our coefficients of interest remain positive indicating that the inability to determine clearly whether the government won or lost in a subset of cases does not affect our results.

### D.2 Alternative functional forms

So far we have used the linear probability model. Next we rerun our baseline specification using logit and probit instead. We observe that the coefficient estimates of  $\lambda_1$  and  $\lambda_2$  remain positive and significant. The results are reported in table 20 in appendix B.

#### D.3 Constant marginal effects and average treatment effects

In all the specifications so far, we used factor variables to indicate the three kinds of benches, that is, those with zero, one, or two judges retiring long before an election. In this section we consider two restrictions.

First, we run a restricted version of eq. (2) by imposing linearity on the effect of pandering incentives in the number of judges retiring long before an election. We estimate

$$won_{ikt} = \alpha_0 + \beta \ importance_i + \sum_j \alpha_j b_{jk} + \delta_t + \lambda \ importance_i \times num \ retired \ long \ before_k + \mathbf{X}'_{ik}\eta + \varepsilon_{ikt}.$$
(11)

This specification uses the number of judges retiring long before an election as the interacting variable with importance. This variable takes values 0, 1, and 2. We find that the estimates for  $\lambda$  are positive, significant, and stable across all specifications.

The results of estimating eq. (11) are shown in table 21 in appendix B. The specification in eq. (11) imposes the restriction on eq. (2) that the marginal effect of the number of judges retiring long before an election is constant, that is  $\lambda_2 = 2\lambda_1$ . This restriction is rejected by an *F*-test, whose *p*-values are reported in the last row of table 21. Second, we also run

$$won_{ikt} = \alpha_0 + \beta \text{ importance}_i + \lambda \text{ importance}_i \times at \text{ least one retired long before}_k + \gamma at \text{ least one retired long before}_k + \sum_j \alpha_j b_{jk} + \delta_t + \mathbf{X}'_{ik} \eta + \varepsilon_{ikt} \,.$$
(12)

The results are reported in table 22 in appendix B. This specification pools the benches with one or two judges retiring long before an election. This is a special case of eq. (2) as it forces the restriction  $\lambda_2 = \lambda_1$ . All our results are robust to using this as our baseline specification. However, we use eq. (2) as our baseline since the restriction above is not supported empirically, as shown by the *p*-values for the *F*-test of this restriction reported in table 3.

## E Pandering: A closer look

In this section, we examine pandering more closely and explore the channels through which pandering occurs. In appendix E.1 we examine why importance has a negative effect on deciding in favour of the government as seen in the estimates of importance in table 3. In appendix E.2, we examine whether pandering occurs through strategically delaying unfavourable decisions or expediting favourable ones. In appendix E.3 we investigate whether the effect of pandering incentives is stronger for the senior judge on the bench, relative to the junior judge.

### E.1 Negative effect of importance on decisions

In table 3 in section 5, the estimates for the coefficient on importance are negative and significant in all specifications. This suggests that cases with higher importance are less likely to be decided in favour of the government by control group benches. There are three possible explanations for this.

Negative correlation between importance and merits First, it is possible that importance is negatively correlated with merits so that the negative estimates of  $\beta$  indicate that, on merits, more important cases are less likely to be decided in favour of the government. Our identification strategy accommodates this since we only assume that the difference in merits between important and non-important cases is uncorrelated to the allocation of cases to benches. We examine the correlation between importance and merits to test whether this explanation is driving the negative effect of importance on decisions. Like in appendix C.1 we focus on appeals and proxy for merits by the decision of the lower court and we find that in fact importance is positively associated with merits which is inconsistent with this explanation.

**Signalling** Second, the negative estimates of  $\beta$  may suggest that lacking incentives to pander, control group judges actively decide against the government in more important cases

with a view to present themselves or the SC as a whole as being independent of government control. It is possible that the lack of post-SC career concerns for judges in the control group leads them to take conspicuous stands against the government. It is also possible that these judges decide against the government to maintain the perception of independence of the SC. On the other hand, the treatment group judges may decide important cases on merits. If true, this would also lead to a positive interaction coefficient.

This explanation is consistent with post-SC career incentives having an effect on judicial behaviour. However, if true, our results would not indicate pandering but rather signalling. To check this, we first count the number of news articles in the Factiva database mentioning each of the 72 judges in our sample during their SC tenure. Our measure of signalling is obtained by dividing the total number of articles for a judge by the length of his tenure.

We check whether signalling is associated with whether a judge retires long before an election. The results are reported in table 29 in appendix A. We find that the estimates are negative, suggesting that control group judges signal more on average. However, the estimates are consistently insignificant. To investigate further, we measure signalling for a bench with the sum of the individual measures for the judges on that bench. We then run our baseline specification in eq. (12) with the addition of the interaction of importance and signalling at the bench level. The results are presented in table 36.

We find that the estimates of the key coefficients of interest remain largely unchanged. This indicates that pandering incentives, namely the interaction of importance and retirementelection distance, are not proxying for the interaction of importance and signalling. Interestingly, the coefficient for the new interaction term is negative and significant. This suggests that judges that signal decide important cases against the government more frequently. Nonetheless, as mentioned earlier, this effect is independent of pandering and does not appear to be the channel through which post-SC career incentives affect judicial decisions.

**Public scrutiny** Finally, it is possible that all benches pander in non-important cases, but only the treatment benches pander in the important ones. This is plausible since there is greater public scrutiny of important cases and blatant pandering in such cases, particularly in the presence of senior lawyers, is less likely. Hence, only judges with strong pandering incentives would pander in important cases, where the rewards make up for the added reputational risk induced by increased scrutiny. This would raise the likelihood of non-important cases being decided in favour of the government by control benches relative to important ones, and yield a negative estimate of the effect of importance. Given the lack of empirical support for the two alternative explanations above, we believe this last one to be the most likely.

### E.2 Strategic delay or hastening of decisions

In this section, we examine whether there is any evidence that pandering occurs through judges delaying unfavourable decisions and/or expediting favourable ones. A possible pandering mechanism is that judges retiring long before an election pander by strategically delaying

	(1)	(2)	(3)	(4)	(5)
Importance	-0.229***	-0.243***	-0.343***	-0.225***	-0.240***
	(0.0569)	(0.0598)	(0.0583)	(0.0519)	(0.0543)
One retired long before	0.259***	0.262***	$0.314^{***}$	$0.254^{***}$	0.258***
× Importance	(0.0660)	(0.0766)	(0.0899)	(0.0648)	(0.0729)
	(0.0000)	(0.0100)	(0.0000)	(0.0010)	(0.0.20)
Both retired long before	$0.280^{***}$	$0.294^{***}$	$0.386^{***}$	$0.277^{***}$	$0.291^{***}$
$\times$ Importance	(0.0754)	(0.0832)	(0.0676)	(0.0686)	(0.0704)
Importance $\times$ Normalised	-0.0523*	-0.0480	-0.0313	-0.0522*	-0.0464
news articles	(0.0276)	(0.0292)	(0.0211)	(0.0296)	(0.0304)
	(0.0210)	(0.0202)	(0.0211)	(0.0200)	(0.0001)
Normalised news articles			-0.00107		
			(0.0214)		
One retired long before			0.0454		
One retried long before			(0.0429)		
			(0.0120)		
Both retired long before			0.00782		
			(0.0810)		
Judge dummies	Yes	Yes	No	Yes	Yes
Judge dummes	165	165	NO	165	165
Case controls	No	No	No	Yes	Yes
V 1 .	NT	V	NT	NT	V
Year dummies	No	Yes	No	No	Yes
Observations	652	652	652	652	652
$R^2$	0.198	0.213	0.027	0.208	0.223

Table 36: Signalling vs pandering

Dependent variable is whether government won. All specifications include judge dummies, year dummies and the following case controls: type of case (appeal/petition), whether government was appellant/petitioner, whether CJI was one of the judges, the tenures of the senior and junior judge at the time of decision. Standard errors reported in the parentheses are clustered at the judge dyad level. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

those decisions that are unfavourable to the government. This strategic behaviour would lead to our sample being censored, since judges retiring long before an election would delay making unfavourable decisions in important cases. Once they retire, such cases would then be reassigned to other judges. This mechanism is consistent with the idea of pandering incentives having an effect on judicial behaviour. However, it may have different welfare implications from the channel where the actual decision in the case is affected by pandering incentives.

Unfortunately, we cannot directly observe cases that judges never decide on if the case is delayed beyond retirement. However, we can test whether pandering incentives affect how quickly judges decide cases that are in our sample. In our data, we observe the year in which the case was filed in the Supreme Court. Subtracting this from the date on which the case was decided, we can measure how long it took for the case to be decided.<sup>40</sup> To test whether treatment benches delay important cases where the government loses we run

time to 
$$decision_{ikt} = \alpha_0 + \sum_j \alpha_j b_{jk} + \delta_t + \beta_0 importance_i + \beta_1 won_{ik} + \beta_2 importance_i \times won_{ik}$$
  
+  $\gamma_1 importance_i \times one retired long before_k + \gamma_2 importance_i \times both retired long before_k$   
+  $\lambda_1 won_{ik} \times importance_i \times one retired long before_k + \psi_1 won_{ik} \times one retired long before_k$   
+  $\lambda_2 won_{ik} \times importance_i \times both retired long before_k + \psi_2 won_{ik} \times both retired long before_k$   
+  $\mathbf{X}'_{ik}\eta + \varepsilon_{ikt}$ . (13)

If treatment benches strategically delay unfavourable decisions in important cases, we would expect  $\gamma_1$  and  $\gamma_2$  to be positive. This would be a test of the hypothesis described above under the assumption that treatment benches attempt to delay unfavourable decisions in important cases relative to control benches, and that not all such cases are delayed beyond the retirement of the judges in the bench. The latter is a reasonable assumption since our sample does contain important cases that were decided against the government by treatment group benches. The estimates for  $\gamma_1$  and  $\gamma_2$  essentially test for the presence of delay in these cases.

The results are reported in table 28 in appendix B. All estimates of  $\gamma_1$  and  $\gamma_2$  are insignificant and show no pattern across the columns. Moreover, this specification also allows us to test whether treatment benches strategically expedite decisions in important cases that are in favour of the government. If this occurs we would expect the estimates for  $\lambda_1$  and  $\lambda_2$  to be negative. We find no such effect as the estimates for  $\lambda_1$  and  $\lambda_2$  are all positive. Strategic delay or hastening of decisions does not appear to be the channel through which pandering occurs.

<sup>&</sup>lt;sup>40</sup>Unlike the exact date of decision, which we observe, we only observe the year in which the case was filed. We therefore treat all cases as being filed on the 1st of January of the year of filing. This measurement error in the dependent variable is likely to increase our standard errors but unlikely to introduce any bias as we do not expect case characteristics to be systematically correlated with whether a case is filed early or late in a calendar year.

### E.3 Pandering incentives and seniority

A seniority norm may be at work in the Supreme Court. According to the norm, the senior judge on the bench may have greater authority to decide the outcome of the case. Seniority in the Supreme Court is based purely on the tenure on the Court which, as discussed in section 2.2, is determined by the date of appointment to the Court. In this section, we attempt to test whether there is a differential effect of the senior judge's pandering incentives on judicial decisions relative to that of the junior judge. We run

$$won_{ikt} = \alpha_0 + \sum_j \alpha_j b_{jk} + \delta_t + \beta \text{ importance}_i + \gamma_S \text{ senior retired long before}_k + \lambda_S \text{ importance}_i \times \text{ senior retired long before}_k + \lambda_J \text{ importance}_i \times \text{ junior retired long before}_k + \mathbf{X}'_{ik}\eta + \varepsilon_{ikt} .$$
(14)

The results of estimating this specification are reported in table 30 in appendix B. Note that in columns (4) and (5) we cannot estimate the effect of the junior judge retiring long before an election since the sum of the dummies for senior and junior judge retiring long before are equal to the number of judges retiring long before. This in turn is fully determined by judge characteristics and hence perfectly collinear with the judge dummies. The estimates for  $\lambda_S$  and  $\lambda_J$  are positive and significant across all specifications. This suggests that the pandering incentives of both the senior and the junior judge have an effect on the decision in the case. The estimates for  $\lambda_S$  and  $\lambda_J$  are similar in magnitude suggesting that there is no differential effect of pandering incentives of the senior judge. We test for the equality of  $\lambda_S$ and  $\lambda_J$  and find that we cannot reject this hypothesis. This suggests that a seniority norm, even if it exists, does not appear to mediate the effect of pandering incentives on judicial decision-making.

### F Dyad-robust clustering

In this paper we have used dyad-robust clustering (Cameron and Miller 2014) to compute the standard errors. This form of clustering allows for correlation between error terms across cases that have at least one judge in common.

This differs from two-way clustering since two-way clustering imposes a particular structure on the correlations that is unsuitable for our context. Applying standard two-way clustering to our regressions would require the use of two clustering variables reflecting the identity of the judges deciding a case. Any choice of such variables, such as first and second judge by alphabetical order of name, senior and junior judge, author and non-author, imposes the following arbitrary restriction: error terms across two cases are treated as being uncorrelated if the judge appearing in both cases is the first judge in a case and the second judge in the other. Dyad-robust clustering generalises two-way clustering by allowing correlations in the error terms across any two cases that share a common judge.

Note that dyad-robust clustering also subsumes clustering at the bench level. Clustering

at the bench level assumes that the error terms in cases decided by different benches are uncorrelated. However, this assumption may be too strong in our context since there may be correlation across the error terms for the cases decided by the same judge when he appears in different benches. Dyad-robust clustering allows for such correlation. Nonetheless, our results are robust to clustering at the bench level. These are available upon request.