

# Legal Disparities and Judicial Mitigation: Muslim Petitioners in an Indian High Court

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This study examines case processing and outcomes for Muslim litigants at the Patna High Court in Bihar, India (2009-2019). Using machine learning to infer religious identity from names in more than 200,000 cases, we document three patterns. First, while judges appear randomly assigned at initial filing, Muslim petitioners are 30 percentage points more likely than Hindu petitioners to select Muslim advocates. Second, cases pairing Muslim petitioners with Muslim advocates experience worse outcomes—including lower admission rates and fewer successful appeals. Third, Muslim petitioners matched with high-caste Hindu judges experience better outcomes than those matched with Muslim judges, a pattern that weakens after 2012. These patterns challenge the expectation that minority litigants benefit from in-group judges and suggest that majority-group judges may mitigate disadvantages faced by minority litigants — although this mitigation weakens with the rise of religious nationalism in India.

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# 1 Introduction

Judicial diversity initiatives worldwide are based on a common premise: that representation of minority groups on the bench improves justice for minority litigants. Evidence from across the world supports this logic. In Kenya, judges are 3 to 5 percentage points more likely to rule in favor of co-ethnic litigants (Choi, Harris, and Shen-Bayh 2022; Chen, Graham, et al. 2023). In the United States, all-white juries convict Black defendants at substantially higher rates than white defendants, a disparity that largely disappears when at least one Black juror is present (Anwar, Bayer, and Hjalmarsson 2012), and the identity of the judge has been shown to shape racial disparities in sentencing (Abrams, Bertrand, and Mullainathan 2012). However, this paper shows that the relationship between judicial identity and minority outcomes is far more contingent than this premise suggests. In some contexts, it is the majority-group judges — not minority ones — who provide the most protection.

We develop this argument through a comprehensive analysis of more than 200,000 cases from the Patna High Court in the state of Bihar, India (2009-2019). India’s legal system provides a powerful setting for studying how judicial identity shapes minority outcomes. It combines formal institutional features — a roster-based judge assignment system that produces quasi-random matching — with deep religious and caste-based social stratification and a rapidly shifting political environment (Eberhard and Gupta 2005; Metcalf 2014). Legal pluralism, where personal religious laws govern family matters alongside a secular civil code, makes religious identity legally salient in ways that are less common in Western contexts (Ghosh and Chakrabarti 2021; Subramanian 2014). And the decade we study, 2009-2019, spans a critical political transition: the rise of Hindu nationalism and the BJP’s landmark 2014 electoral victory, allowing us to examine how judicial behavior toward minorities shifts under majoritarian political pressure (Bose 2018; Varshney 2022).

The minority community most affected by these political shifts is India’s Muslim population, representing 14.2% of the country’s population (Census of India 2011).<sup>1</sup> Empirical evidence documents that they face institutional under-representation (Bhargava and Srinivasan 2007; Shaban 2018), educational disadvantages (Basant, Shariff, et al. 2010), labor market discrimination (Banerjee et al. 2009; Thorat and Attewell 2007; Deshpande and Newman 2007; Thorat 2010), and exclusion from anti-poverty programs (Krishna and Shariff 2011; Shaban 2018). These disparities are not fully explained by socioeconomic status or geography. In the justice system specifically, Muslims are overrepresented in Indian prisons and crime statistics (Ahmad and Siddiqui 2017; Vicziany 2024), and judges exposed to communal violence have been shown to deny bail to Muslim defendants at higher rates (Bharti and Roy 2023).

To date, much of the analysis of the Indian judiciary focuses on high-profile incidents and broad national

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<sup>1</sup>If considered as a separate nation, this demographic of approximately 175 million individuals would rank as the world’s eighth most populous country.

trends, neglecting the everyday experiences of Muslim citizens navigating formal legal institutions. Empirical research on the Indian legal system outside the Supreme Court — which handles only a tiny fraction of cases — remains sparse (Gadbois 2011; Galanter and Robinson 2017; Chandra, Kalantry, and Hubbard 2023). Citizens seeking to protect fundamental rights, file writ petitions, or address grievances against lower courts are more likely to rely on high courts (Ghosh and Chakrabarti 2021), but their experiences within these institutions are poorly understood.

Our analysis seeks to fill this gap. Using machine learning algorithms to infer the religion and caste of petitioners, advocates, and judges from names, we document three patterns. First, while judge assignment is quasi-random at the point of filing, Muslim petitioners are nearly 30 percentage points more likely than Hindus to select advocates from their own religious community. Second, these petitioner-advocate pairings correlate with worse outcomes, including higher rejection and dismissal rates — though we note that advocate selection is endogenous and these findings require careful interpretation. Third, and most strikingly, Muslim petitioners matched with high-caste Hindu judges experience better outcomes than those matched with Muslim judges: their criminal appeal cases are 6 percentage points more likely to be admitted and 8 percentage points more likely to succeed. This mitigation pattern peaks around 2012 and erodes thereafter.

This paper contributes to three interconnected literatures. First, it advances research on judicial behavior and discrimination (Anwar, Bayer, and Hjalmarsson 2012; Ash, Chen, and Ornaghi 2024; Choi, Harris, and Shen-Bayh 2022; Bharti and Roy 2023; Ash, Asher, et al. 2025). Existing studies document in-group favoritism or minority officials adopting punitive stances toward their own groups — Forman (2017) documents that African-American officials were more likely to “lock up their own,” while Chen (2024) finds judges assign harsher sentences to defendants sharing their initial, especially among Black judges. Our findings add a novel pattern: mitigation by majority-group judges, operating through religious rather than racial identity, and contingent on political context.

Second, this research contributes to political economy scholarship on institutional quality and democratic backsliding (Rodrik 2000; Pande 2020; Egorov and Sonin 2024). Our temporal analysis provides rare empirical evidence of how judicial behavior toward minorities is constrained during periods of majoritarian political pressure, illuminating the fragility of individual judicial efforts without broader institutional support.

Third, we advance empirical understanding of judicial systems in developing democracies (Chemin, Kimalu, and Newman-Bachand 2024; Chandra, Kalantry, and Hubbard 2023; Ash, Asher, et al. 2025; Kang et al. 2020). Our analysis of legal pluralism extends Ghosh and Chakrabarti (2021) and Subramanian (2014), while our findings on advocate selection contribute to research on how representation choices shape outcomes (Chen, Moskowitz, and Shue 2016; Dobbie, Goldin, and Yang 2018; Ryo 2018). Methodologically, our use of machine learning to infer religious identity from

names provides a template for studying discrimination in contexts where direct demographic data is unavailable.

The remainder of the paper is organized as follows. Section 2 provides an overview of the context, Section 3 describes our data, Section 4 discusses our method of inferring religion from last names, Section 5 examines Muslim representation in criminal cases, Section 6 analyzes the matching between judicial stakeholders, and the final section concludes.

## 2 Context

Bihar has one of the largest Muslim populations in India.<sup>2</sup> With a per capita GDP roughly one-third of the national average, Bihar ranks as India’s poorest state; despite a recent growth turnaround, it retains the highest proportion of citizens below the poverty line (NITI Aayog 2023; Reserve Bank of India 2023).

### 2.1 Demographics of Hindus and Muslims

Hindus and Muslims together account for the vast majority of the state’s populace, comprising 82.6% and 16.8% of the population, respectively (Census of India 2011). Within Bihar, Muslims are concentrated in specific districts in the east of the state (Figure A1).

Both Hindus and Muslims are stratified along the lines of caste or *jati*.<sup>3</sup> Presently, Hindu “jatis” in Bihar are officially categorized into government-recognized groups such as “Scheduled Castes (SC)”, “Other Backward Classes (OBC)”, and “Forward Castes” or “General Castes”. Muslim castes also exhibit a similar tripartite division: “ashraf” (comparable to forward castes), “ajlaf” (similar to OBCs), and “arzal” (analogous to SCs), though these distinctions are less formalized in state policies (Basant, Shariff, et al. 2010).

Muslims in Bihar appear to have lagged behind Hindus in socioeconomic development. Recent census data, though controversial, indicate that they are now significantly poorer than any Hindu group, with lower incomes, land holdings, literacy rates, and access to poverty alleviation programs (Verma 2023). This is consistent with previous empirical studies (Joshi, Kochhar, and Rao 2022).

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<sup>2</sup>Four states together account for more than 60% of India’s entire Muslim population: Uttar Pradesh (22.34%), West Bengal (14.31%), Bihar (10.1%) and Maharashtra (7.53%) (Census of India 2011),

<sup>3</sup>We define caste here as *jati*, i.e. hereditarily formed endogamous groups whose identities are manifested in a variety of ways that include (but not restricted to) naming conventions, geographic location, occupation, property ownership, diet, gender norms, social practices, and religious practices (Joshi, Kochhar, and Rao 2022).

## 2.2 The Politics of Hindu Muslim Relations

Hindus and Muslims have co-existed in Bihar for centuries (Metcalf 2014). Tensions between the two groups escalated during British rule, primarily due to the establishment of separate legal systems, a line of separation that exists today (Metcalf and Metcalf 2012).<sup>4</sup>

However, despite these divisions in this period, Hindus and Muslims collaborated on issues such as the opposition to the dominance of Bengali language and culture, and the establishment of Bihar as a separate state in 1912 (Metcalf and Metcalf 2012). During the Indian freedom movement, many Bihari Muslims rejected the notion of Muslim separatism, instead choosing to support a unified India (Rai 2006; Ahmed 2022).<sup>5</sup>

After Indian independence in 1947, both communities have been influenced by the national effort to construct a constitutional, secular, pluralist democracy. For the first four decades after Indian independence, Muslims as a whole remained broadly aligned with the Indian National Congress (Sajjad 2014). They supported agrarian movements and political reform movements that challenged established feudal power structures and elite interests in the state (Kumar 2018; Jaffrelot 2003; Jaffrelot 2010). In the 1990s, marginalized Muslims began to follow their Hindu counterparts to push for social justice policies such as affirmative action<sup>6</sup>

Since the turn of the century, the dynamics within the Muslim community have been significantly shaped by the rise of Hindutva politics. The 2014 national election marks a critical turning point. The BJP, led by Narendra Modi, has advanced polarizing narratives that cast previous governments as having “appeased” India’s Muslim minority at the expense of the Hindu majority (Shaban 2018; Basu 2021). The empirical record tells a different story. Far from enjoying special protection, Muslims have faced extrajudicial violence — as in the 2002 Gujarat riots, where police officers participated with legal impunity (Chatterjee 2017) — and since 2014, the judiciary has proved unable to shield them from increasing hate crimes (Basu 2021; Prasad et al. 2018) or from media narratives that cast them as anti-national (Jagannathan, Rai, and Jaffrelot 2022; Poblete-Cazenave 2024)."

Since 2014, Muslims have often pursued "survival strategies" such as support for non-BJP parties. Pan-

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<sup>4</sup> In India, matters of personal law – matters of marriage, divorce, inheritance, and family relations – are determined based on a citizen’s religion (Metcalf and Metcalf 2012; Shaban 2018). Hindu Personal Law governs Hindus, Sikhs, Jains, and Buddhists and includes the Hindu Marriage Act, the Hindu Succession Act, and the Hindu Minority and Guardianship Act (Menski 2008). Muslim Personal Law is based on Sharia and includes the Muslim Personal Law (Shariat) Application Act and Dissolution of Muslim Marriages Act (Shaban 2018). There are additional laws, such as the Special Marriage Act, which govern personal law for people outside these religions (such as Christians and Zoroastrians).

<sup>5</sup>For example, the Momin Ansaris, or weavers, established the Momin Conference, which opposed the Muslim League, its politics of separatism and the decision to create Pakistan and merged into the Congress after Independence (Rai 2006).

<sup>6</sup>In the early 1990s, the “Pasmanda” movement emerged to champion the rights of Ajlaf and Arzal Muslims, who make up around 70% of the Muslim population and face marginalization without constitutional entitlements to affirmative action programs compared to Hindus (Sajjad 2014). These movements significantly impacted the political landscape of the state (Jaffrelot and Kumar 2012).

Indian Muslim parties such as the All India Majlis-e-Ittehad-ul-Muslimeen (AIMIM) have emerged and even won elections (Ahmed 2022).

### 2.3 The Patna High Court

The Patna High Court is the highest judicial authority in Bihar.<sup>7</sup> The court was established in 1912 and began hearing cases in 1916 with a Chief Justice and six other judges. By 2019, the court had 22 permanent judges (including the Chief Justice) and 14 additional judges. The court has jurisdiction over civil and criminal matters. Although its primary function is to hear appeals from district courts within the state, it also possesses original jurisdiction over certain matters, including constitutional issues.

All judges and lawyers practicing at the Patna High Court have received standardized legal training that includes mandatory instruction in multiple systems of personal law (see footnote 4). Indian legal education, regulated by the Bar Council of India, requires all law students to complete separate courses in Hindu Law, Muslim Law, and other personal law systems as part of the core LLB curriculum. This ensures that both judges and advocates are equipped to handle cases arising under different religious personal law systems, regardless of their own religious background. This institutional feature means that judges at the Patna High Court have formal training in Muslim personal law matters, including marriage, divorce, maintenance, and inheritance under Sharia principles—knowledge particularly relevant for adjudicating the cases analyzed in this study.

Beyond its jurisdiction in Bihar, the Patna High Court has been instrumental in shaping India's broader legal and constitutional development. Bihar's courts have frequently been at the forefront of national controversies about land reform (Sinha 2019) and fundamental rights of citizens (Baxi 2000). Between 1950 and 1989, the Patna High Court accounted for some of the most prominent and influential justices who served on the Supreme Court of India (Gadbois 2011). Patna High Court judges have had a strong representation on the Indian Supreme Court (Chandrachud 2020).

An ironic aspect of the Patna High Court, which perhaps applies to all India, is that even as the court continues to play a critical role in the governance of the country, it suffers from a growing backlog and is widely believed to be influenced by state politics (Mehta 2007). Political battles, often involving complex allegations of corruption and criminality, frequently end up at the Patna High Court, strained by its political neutrality (Chakrabarti 2013; Kumar 2012; Roy 1997; Ananth 2013). These challenges were particularly evident during our study period, especially after the BJP's victory in 2014. During this time, two state elections were held in Bihar (in November 2010 and November 2015).<sup>8</sup>

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<sup>7</sup>India's judicial system comprises three tiers: the Supreme Court at the apex, High Courts at the state level, and District Courts at the base.

<sup>8</sup>The November 2020 election falls outside our sample period.

## 2.4 Institutional Procedures at the Patna High Court

Like all Indian High Courts, the Patna High Court exercises two principal forms of jurisdiction. Under its appellate jurisdiction, which constitutes the majority of its caseload, the court hears appeals against decisions of district and session courts across Bihar. Criminal appellate matters include appeals against convictions (particularly sentences that exceed seven years), state appeals against acquittals, and revisions of lower court orders. Under its original jurisdiction, the court adjudicates constitutional petitions, including writ petitions such as habeas corpus, mandamus, certiorari, prohibition, and quo warranto, filed to protect citizens' fundamental rights. Cases may be heard by a single judge or by a division bench of two or more judges, depending on the nature and gravity of the matter.

To initiate a case, a petitioner first retains an advocate – termed the filing advocate—who prepares and files the petition or appeal. The selection of this advocate is entirely at the petitioner's discretion and occurs before the case enters the court's administrative system. As we document in Section 6, this choice is strongly associated with shared religious identity: Muslim petitioners are approximately 30 percentage points more likely to select a Muslim advocate.

Once filed, a case enters the administrative pipeline of the court, known by the acronym FORA: Filing → Objections → Registration → Allocation.<sup>9</sup> At each stage, court staff review the paperwork for completeness and jurisdictional compliance. Erroneous or incomplete filings result in significant attrition; only cases that survive to the allocation stage are assigned to judges and officially maintained in the e-Courts system. This explains why only approximately 25% of the initial cases filed appear in our data, a pattern consistent with previous observations of quality challenges in cases filed in Indian courts (Saxena and Saroj 2022; Chandra, Kalantry, and Hubbard 2023).

Cases that survive the FORA pipeline are assigned to a judge by the Chief Justice through the “roster system.” This mechanism is designed to ensure impartiality by distributing cases across judges and prohibiting judges from presiding over matters involving parties with whom they have familial or social connections. The lists identifying such conflicts of interest are updated regularly. Crucially, because the filing advocate is selected *before* the case is allocated, there is a temporal separation between the petitioner's choice of advocate and the assignment of the judge. This institutional feature is central to our empirical strategy: it means that the initial judge-petitioner match is determined by the roster system rather than by the petitioner's selection.

Following assignment, parties may retain additional advocates – known as litigating advocates – to present oral arguments in court. These advocates are typically selected for their courtroom experience and their track record before specific judges (Galanter and Robinson 2017). Litigating advocates with larger case volumes or specialized expertise may be more likely to appear before certain judges,

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<sup>9</sup>See <https://districts.ecourts.gov.in/sites/default/files/Case%20Management.pdf>.

introducing a potential source of nonrandom matching at later stages of proceedings that is distinct from the initial judge assignment.

### 3 Data

We scraped publicly available case data from the Patna High Court in the summer of 2020.<sup>10</sup> This yielded 1,073,109 cases spanning 2009–2019. Of these, only 246,446 appear to have been filed successfully and 224,435 were fully recorded in the e-Courts system.<sup>11</sup> That only 25% of initially filed cases survive into the system is consistent with the attrition along the FORA pipeline described in Section 2.4. For these cases, we extracted complete information on case type (civil or criminal, and whether the case is an appeal from a lower court), filing date, decision dates, the disposition, and the names of the presiding judge, the petitioner, and the filing advocate (Table 1 and Appendix Figure A2).<sup>12</sup>

In our sample, the government is a litigant in 78% of cases (76.1% as respondent and 2.3% as petitioner), comparable to Chandra, Kalantry, and Hubbard (2023), who find the government is a litigant in approximately 73% of matters admitted to the Supreme Court of India.<sup>13</sup> This prevalence may stem from weak incentives for dispute resolution within India’s large public bureaucracies and the bureaucracy’s ease of access to the justice system (Sneha et al. 2021).

Given our focus on individual access to justice for Muslim petitioners, we exclude all cases where the government appears as a petitioner. Government litigation involves distinctive legal issues, resources, and strategic considerations that would obscure patterns in the experiences of individual litigants. Empirical analysis of government-filed cases remains an important topic for future research.

Our analysis also incorporates the biographical characteristics (mainly caste, religion, age, and education) of judges who have served at the Patna High Court. Since there is no publicly accessible database of judges for the courts of India, we gather this information from two official sources: (a) the Judge Handbooks that have been released by the Supreme Court of India in 2014 and 2018; (b) the websites of the Patna High Court. We note a total of 84 judges who have served at the Patna High

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<sup>10</sup>The Patna High Court has published cases online since 2010 as part of a broader national effort to digitize legal information in India.

<sup>11</sup>The e-Courts database allows citizens to track their cases and retrieve key information such as hearing dates, judgments, and orders.

<sup>12</sup>Our classification of “criminal cases” follows the Patna High Court’s own categorization in the e-Courts database. References to “criminal cases” primarily denote appeals and petitions under the High Court’s appellate and supervisory criminal jurisdiction, not original criminal filings. The court exercises substantial criminal jurisdiction through: (1) appeals against convictions by Sessions Judges, particularly for sentences exceeding seven years; (2) state appeals against acquittals; (3) revisions of lower court orders; and (4) constitutional petitions related to criminal matters.

<sup>13</sup>The Government of India has acknowledged this issue. In 2010, the Ministry of Law and Justice issued a *National Litigation Policy* that recognized the government as “the predominant litigant in courts and tribunals throughout the country” (as cited in Rangarajan 2024).

Court in our sample period.

## 4 Analysis of Names for Markers of Religion

Since our data lack official religion markers for litigants, lawyers and judges, we infer the religion of individuals mentioned in court records by analyzing last names using a machine learning algorithm specifically tailored to the state of Bihar.<sup>14</sup>

To do this, we create a comprehensive list of Hindu and Muslim names common in Bihar by extracting litigant names from cases filed under the Muslim Women (Protection of Rights on Divorce) Act, 1986, and the Hindu Marriage Act, 1955, at the Patna High Court. This approach ensures a diverse and representative sample of names for both genders from these religious communities, as only individuals from the respective backgrounds can initiate cases under these acts.

This database of names functions as training data for a machine learning algorithm designed to predict whether a given name is Hindu, Muslim, or "Other".<sup>15</sup> The algorithm extracts groups of 1 to 4 characters (including white spaces) from the names, stores them in the form of "feature vectors" and measures the co-occurrence of alphabets. Since the training data contains information on religion, the algorithm is able to note the distinctive features of Muslim and Hindu names. For example, for Muslim names (relative to Hindu names), it notes features such as the higher incidence of the alphabets 'z' and 'q', or the higher frequency of the cooccurrence of 'mm' or 'ee'. After analyzing the training data, the algorithm is deployed to make predictions on new out-of-sample court data.<sup>16</sup> This method allows us to predict even religiously neutral names such as *Shah* and *Malik*, which are used by both Hindus and Muslims in Bihar.

We use similar methods to draw inferences about caste identities. The full details of our approach are described in a separate paper (Bhupatiraju et al. 2024). In summary, we analyze Hindu names featured in the Bihar Socio-Economic Caste Census (SECC) data, which include self-reported caste information for each name.<sup>17</sup> This allowed us to map most of the surnames to specific caste categories.

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<sup>14</sup>In a recent paper, Ash, Asher, et al. (2025) employ a similar algorithm on a national scale. However, given our focus on a single state and the fact that names can be uniquely specific to regions in India, we believe a custom algorithm tailored for Bihar is more appropriate for this analysis.

<sup>15</sup>Unfortunately, the number of litigants who hail from Christian, Buddhist or other religious groups in our sample is too small to make appropriate matches. Those who are neither Hindu nor Muslim are included in the category "Other".

<sup>16</sup>To make the final prediction out-of-sample, we used a variety of methods to evaluate various classifiers, including decision trees, random forests, logistic regression, linear SVM and character RNNs. We found that the simple linear SVM and logistic regression classifiers performed the best in the various metrics, producing an accuracy of around 91%. For this and for their simplicity, we relied on logistic regression to make the prediction out of the sample based on feature vectors

<sup>17</sup>Our surveys lack self-reported caste information from Muslims, precluding any inference of caste from Muslim names. However, it is important to note, as highlighted in Section 2, that the Indian government has predominantly recognized caste among Hindus, with most affirmative action and poverty alleviation programs based on caste exclusively accessible to the Hindu population. Although Muslims are by no means a monolithic group, they are grouped together in official political, economic, and institutional contexts, and thus we group them in this analysis.

We created a separate category for caste-neutral names that were difficult to categorize. We group these names into two distinct categories – high caste names that have historically been unambiguously associated with high status in Bihar, and all others that are either ambiguous or associated with a marginalized status in this context.

To further validate the predictions of religion and caste that emerge from this method, we also conducted a qualitative survey. We interviewed a dozen elderly women in the city of Patna who had spent their entire lives in the state and had extensive knowledge of the social structures in the state. The goal was to check what associations, if any, were made between specific last names and markers of caste and religion. We presented survey respondents, who were all grandparents who had successfully contracted caste-based arranged marriages within the past 10 years, with a list of names, followed by a series of questions about the caste, or religious background associated with the name. We found that the Muslim names in our sample were universally acknowledged as such, alongside upper-caste names like Bhumihar Brahmins (who have names such as Ojha, Pande or Upadhyaya).

For the rest of this paper, we assign to each name in our sample of litigants, advocates, and lawyers the religion or caste identity predicted by our algorithm. Throughout the paper, we use terms such as "Muslim petitioner" or "petitioners with Muslim names" interchangeably and mean "petitioners whose names are predicted to be Muslim on the basis of our algorithm". Moreover, when we refer to "Muslim petitioners" in criminal cases, we mean individuals who have appealed convictions from lower courts, filed revision petitions challenging criminal proceedings, or sought constitutional remedies like habeas corpus in criminal contexts (see footnote 12). We construct similar terms for judges.

## 5 Muslim Representation in Criminal Cases

The first step of our analysis is to examine the representation of Muslims in the cases. In our final sample of 204,169 cases filed in Patna High Court, 20,040 cases (9.8%) featured a Muslim petitioner, although these estimates show considerable regional variation in the districts of Bihar. The distribution of these filings across districts is presented in Appendix Table A1. We also note that Muslims are also more likely to be seen in criminal cases (11.9% of petitioners) compared to civil cases. However, at the level of judges and advocates, we see a different pattern. Only 5% of advocates and 9% of judges at the Patna High Court are Muslim (Table 1).

This evidence resonates with the claim that Muslims are overrepresented in the Indian criminal justice system (Ahmad and Siddiqui 2017). To further investigate this, we adopt the methodology of Ash, Asher, et al. (2025), who compares the share of Muslims in specific types of cases with their share in the Indian population. We estimate these ratios using our data in addition to the actual data from Ash, Asher, et al. (2025) filtered to focus on the state of Bihar.<sup>18</sup> For both sets of calculations, we rely on

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<sup>18</sup>We obtained this data from <https://github.com/devdatalab/paper-justice>. We subset the data for the state

the population share of Muslims that was reported in the last census of 2011.

The results are presented in Table 2 and Figure 1. Column 1 of Table 2 shows that in the analysis by Ash, Asher, et al. (2025), Muslims are overrepresented by 3% in the set of all criminal charges, but the extent varies depending on the type of charge. As noted by these authors, “relative to their population share, Muslims are 36% more likely to be charged with crimes against women, 37% more likely to be charged with robbery, and 62% more likely to be charged with marriage offenses, but 5% less likely to face charges for murder” (Ash, Asher, et al. 2025, pages 15-16).

We observe similar estimates in our data. In district courts (columns 3 and 4), we see that Muslims are underrepresented by 2% as defendants in criminal charges, but are accurately represented as petitioners. However, this overall balance conceals significant disparities between different types of offenses. Specifically, Muslims are overrepresented in cases of sexual assault (16%), crimes against women (30%), marriage-related offenses (48%), and trespassing (17%). In contrast, they are underrepresented by 12% as defendants in murder cases and by 11% in cases involving bodily harm. Furthermore, in criminal cases heard at the Patna High Court, Muslims are markedly underrepresented by 30% as petitioners and overrepresented by 14% as defendants. This is a notable result in its own right. Additional research into the attributes of the cases brought by Muslims (relative to Hindus) from the lower to the upper court would be an interesting question for additional research that is beyond the scope of the current paper.

Figure 1 presents the trends in these estimates over the sample period; we note that Muslims remain underrepresented as petitioners at the High Court throughout the sample period. Their representation as a defendant fluctuates, but this sample is significantly smaller (due to the large number of cases excluded because they feature the Government as the defendant).

Overall, this analysis indicates that while Muslims are typically underrepresented in serious charges such as murder, which are more objective in nature, they appear to be overrepresented in personal-matter lawsuits. This evidence is consistent with previous studies that highlight the significant disadvantages faced by Muslims within the Indian legal system (Ahmad and Siddiqui 2017; Shaban 2018). The disproportionate presence of Muslims as litigants, coupled with their under-representation as petitioners, judges, and lawyers, provides a critical backdrop for the next steps of our analysis.

## 6 Matching Between Litigants, Judges, and Advocates

With the institutional background established in Section 2.4, we now examine how the identities of petitioners, advocates, and judges align in practice. As described earlier, petitioners freely select their own advocates, but judges are assigned through the roster system by the Chief Justice. Previous studies

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of Bihar and run the code for the table that replicates Table 1.

suggest that this system produces quasi-random judge assignment at the time of first assignment in Indian courts; currently, there is no evidence of bias based on observable judge attributes (Ash, Asher, et al. 2025; Chandra, Kalantry, and Hubbard 2023; Bhupatiraju et al. 2024). However, whether litigants are able to select judges surreptitiously on the basis of unobservables (such as ideology), or employ delay tactics or other strategies to manipulate reassignment processes after the first assignment remains an open question for future research.

We examine three types of “matches”: (a) between judges and petitioners; (b) between judges and petitioners’ advocates; and (c) between petitioners and their advocates. We restrict our attention to petitioners and include only those cases in which the case is initiated by an individual (or a firm). For matches between petitioners and judges, we use the following model:

$$\text{Petitioner Muslim}_{icyd} = \beta_0 + \beta_1 \text{Judge Muslim}_i + \beta_2 \text{Judge High Caste}_i + \Theta X_i + \gamma_c + \alpha_y + \nu_d + \epsilon_{icyd} \quad (1)$$

Here, for case  $i$  of type  $c$ , filed in year  $y$  and district  $d$ ,  $\text{Petitioner Muslim}_{icyd}$  takes the value 1 if the petitioner has a Muslim name and 0 otherwise.  $\text{Judge Muslim}_i$  and  $\text{Judge High Caste}_i$  are two, mutually exclusive, dummy variables that each take value 1 if the name of the judge assigned to case  $i$  at this stage signals the relevant identity and 0 otherwise.<sup>19</sup>  $X_c$  is a vector of control variables pertinent to the case, such as the age of the judge, a dummy variable for whether the judge pursued their career in the Supreme Court, and the number of years the judge has a permanent position in the district. The model includes fixed effects for the case-type ( $\gamma_c$ ), year ( $\alpha_y$ ), and district ( $\nu_d$ ), respectively. All analyses employ robust standard errors with two-way clustering at both the district and year levels.

## 6.1 Petitioner-Judge and Advocate-Judge Matching

We estimate Equation 1 to study the matching patterns between petitioners and judges. Given the institutional design of the roster system (Section 2.4), we hypothesize that there should be no affinity between judges and petitioners on the basis of any observable identity. Specifically, there should be no observed tendency for a Muslim petitioner to be heard by a Muslim judge, or by a High Caste Hindu judge. We therefore expect the coefficients  $\beta_1$  and  $\beta_2$  to be zero.

The point estimates of these coefficients are presented as blue dots in Figure 2. We note that neither of the two coefficients is statistically significantly different from zero. In other words, there is no evidence that petitioners with Muslim names are assigned Muslim or High Caste judges in the Patna High Court.

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<sup>19</sup>As noted in Sections 2 and 4, caste is practiced by all religious groups in Bihar as well as much of India, but we group Hindus and Muslims in accordance with the official policies of the Government of India despite the lack of alignment between the lived experiences of these groups and the official state categories.

Next, we examine the matching between advocates and judges. We focus on the filing lawyers, i.e., lawyers who are selected by the petitioner prior to knowing the identity of the assigned judge. Here, also, we hypothesize that there should be no affinity between judges and lawyers based on any type of identity, although we caveat this with the possibility that some lawyers may be hired for their reputation, networks of influence, or specialized services which may give them some leverage to avoid the restrictions of the roster system (Galanter and Robinson 2017). Lawyers with a larger volume of cases or specialized areas of legal expertise may also be more likely to appear before certain judges.

For this part of the analysis, we adapt Equation 1 and replace the variable on the left side by Advocate Muslim<sub>*i*</sub>, a dummy variable equal to one if the petitioner’s advocate (at the time of filing) is Muslim in the case *i*. The relevant coefficients for this regression are presented as red squares in Figure 2. There is no statistically significant effect of petitioners’ advocates matching with High Caste Hindu judges. We note a small but statistically significant coefficient for Judge Muslim<sub>*i*</sub>. This suggests that petitioners’ advocates with Muslim names appear to be about 0.6 percentage points more likely to match a Muslim judge, and the effect is statistically significant at the 5% level ( $p = 0.032$ ). This modest effect does not necessarily suggest a lack of randomness in the assignment of judges. Muslim advocates and judges may both have specialized knowledge in Muslim personal law or vary in their volumes of cases, making it more likely that they match each other (Sajjad 2014; Lemons 2018). Although further investigation is needed to fully interpret this coefficient, we emphasize here that below 1%, the effect size is negligible.

To verify the robustness of the above findings, we performed additional analyses focusing on whether petitioner and advocate identities can predict judicial assignment. Figure A4 presents the predicted probabilities of a multinomial logit model that estimates the probability of judge assignments for each pairing of petitioner-advocate identities. We note that these probabilities remain notably stable across all petitioner and advocate identity categories, suggesting minimal systematic matching. Table A2 further supports this conclusion through two OLS regressions, where we separately examine the likelihood of assignment to High Caste judges (Column 1) and Muslim judges (Column 2). Although we detect statistically significant relationships between petitioner-advocate identities and judicial assignment, the magnitude of these effects is negligible.

## 6.2 Balance Tests for Quasi-Random Judge Assignment

We complement the matching analysis above with formal balance tests following Abrams, Bertrand, and Mullainathan (2012). If the roster system produces quasi-random assignment, then petitioner identity should not predict pre-determined characteristics of the assigned judge. We regress five judge characteristics – age, whether the judge was recruited from the Bar, whether the judge was transferred from another court, years at court, and years as a permanent judge—on a Muslim petitioner indicator, controlling for district, year, and case type fixed effects with standard errors clustered at the district-year

level. Table 3 presents the results. None of the five characteristics show any statistically significant relationship with the Muslim petitioner status.

We also construct a conservative joint-test of the null hypothesis that Muslim petitioner status predicts none of the five characteristics simultaneously, using the sum of squared  $t$ -statistics from the individual regressions, which follows a  $\chi^2_{(5)}$  distribution under the null.<sup>20</sup> The joint  $F$ -statistic is 0.73 ( $p = 0.600$ ), and we fail to reject the null at conventional significance levels.

### 6.3 Petitioner-Advocate Matching

Finally, we examine the matching between petitioners and the lawyers who represent them. As described in Section 2.4, the legal system provides petitioners with considerable freedom in selecting their advocates. In some cases, such as bail applications (which are an increasing fraction of cases at the Patna High Court), a petitioner is allowed to file a case in both the lower court and the high court and to transfer a dismissed case between the two courts. Given the enormous complexity of the courts, the backlog of cases, and the hierarchical structure of the courts in India, relying on an advocate from a single community confers considerable advantages, particularly in navigating complex bureaucratic procedures. This leads us to hypothesize that the religion of the advocates representing petitioners should show a strong association with the identities of the petitioners.

Here, we adapt Equation 1 by replacing the two variables capturing the judge’s identity by two dummy variables equal to one if the petitioner’s advocate is Muslim and Hindu of high caste (we refer to this as High Caste Hindu), respectively. The associated coefficients for this regression are presented as green diamonds in Figure 2. We observe considerable matching. The coefficient for Advocate Muslim suggests that petitioners with Muslim names are about 30 percentage points more likely to match with an advocate with a Muslim name. We also note that petitioners with Muslim names do not appear to be more likely to match advocates with Hindu names that signal affiliation with high castes. In results not shown here, we find that in-group matching is not shown by other groups such as Scheduled Castes.<sup>21</sup>

To check the robustness of these findings, we also report the results of tests analogous to the petitioner-judge balance tests in the previous subsection. These are presented in the Appendix Table A1. For reasons already noted, balance is not expected, and we see that the joint test rejects the null hypothesis ( $F = 5.62$ ,  $p = 0.000$ ), although here also the magnitudes remain substantively small.

What mechanisms could explain why petitioners with Muslim names are more likely to match lawyers from their own community? The existing literature provides several plausible explanations. Most

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<sup>20</sup>This test is conservative because it ignores cross-equation correlation, yielding an upper bound on the true test statistic. If we fail to reject with this test, a proper seemingly unrelated estimation would yield an even smaller test statistic.

<sup>21</sup>These results are available upon request.

fundamentally, Muslim lawyers can have a specialized knowledge of Muslim civil law, which has historically been distinct from Hindu law in matters of marriage, inheritance, and family affairs (Metcalf 2014; Sajjad 2014). Future research could explore the relationship between case types and lawyer selection patterns in the legal system.

It is also important to note that religion has been shown to be an important form of social capital that reduces both search and transaction costs (Iyer 2018). Evidence from other contexts, such as the United States, suggests that a strong relationship between petitioners and advocates can bolster the client’s confidence in the legal process. Lawyers belonging to the same community may have a deeper understanding of cultural nuances and social contexts relevant to the case, thus improving communication and representation effectiveness (Ryo 2018). Shared community bonds can also cultivate trust and rapport, essential elements in legal representation (Young and Hassan 2020).<sup>22</sup>

Put simply, Muslim litigants may prefer lawyers from their community for easier trust-building and accountability. This is crucial given the challenges marginalized citizens face in accessing the Indian justice system (Krishnan et al. 2014). Importantly, while the selection of advocates is not random, our analysis reveals that the initial assignment of the judge appears to be as good as random. Formal balance tests confirm that Muslim petitioner status does not jointly predict pre-determined judge characteristics ( $F = 2.07, p = 0.065$ ), a finding consistent with emerging research in Indian courts (Ash, Asher, et al. 2025; Chandra, Kalantry, and Hubbard 2023).

## 7 Impact of Matching on Outcomes

Next, we examine the outcomes of the justice system. Here, we rely on the official language of the courts themselves to label the stages of a case.<sup>23</sup>

### 7.1 Case Stages and Outcomes

Cases filed at the Patna High Court progress through several stages, each with distinct outcomes recorded in the eCourts system. We organize these into two categories: *Case Status* measures (which track procedural progress) and *Case Outcome* measures (which track substantive disposition).

#### Case Status Measures:

- *Admitted*: The paperwork is in order and the case is deemed suitable for processing at the High

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<sup>22</sup>In the US, this trust can depend on the perceived competence of the decision-maker (Young and Hassan 2020). Disadvantaged defendants can actively resist court-appointed lawyers due to inherent mistrust of a lawyer who does not belong to their own social group (Clair 2021).

<sup>23</sup>These are official terms in the eCourts system that are applied by the e-filing administrator at the time of reviewing the paperwork in the case (see [https://ecourts.gov.in/ecourts\\_home/static/manuals/efiling-User-manual.pdf](https://ecourts.gov.in/ecourts_home/static/manuals/efiling-User-manual.pdf)).

Court level. The case is listed for hearing and substantive decision by the bench.

- *Rejected*: The application is refused at the threshold stage, either because it falls outside the court's jurisdiction (territorial or subject matter) or because the paperwork contains defects of a non-curable nature. Rejected cases do not proceed to a hearing on the merits.
- *Disposed*: The case has reached terminal status, indicating completion at the High Court level. When the bench makes any final decision—whether granting the petition, denying it, or accepting withdrawal—the case is marked as "Disposed."

Cases that are neither admitted nor rejected may be directed elsewhere in the system, such as transferred to another court or returned for procedural corrections.

### **Case Outcome Measures:**

Once a case is admitted and heard, the disposal takes one of three forms:

- *Allowed*: The petition is granted and the petitioner prevails. This represents a success for the party that brought the case to the High Court. In appeals from lower courts, "allowed" indicates that the High Court overturned the lower court's decision in favor of the appellant.
- *Dismissed*: The petition is denied on substantive grounds after full consideration by the bench. The petitioner does not prevail. This represents the court's determination that the petition lacks merit.
- *Withdrawn*: The petitioner voluntarily abandons the proceeding with the court's permission. More specifically, a case is coded as "Withdrawn" when the petitioner (in civil matters) or the Public Prosecutor (in criminal appeals) formally abandons the proceeding with the court's permission.<sup>24</sup> Importantly, withdrawal represents a case closure initiated by the parties rather than adjudicated by the judge and can occur at any stage of proceedings, including before admission.

We use a simple model to analyze the impact of social identity on both the status of the case and the

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<sup>24</sup>Under the Indian Code of Civil Procedure (Order 23 Rule 1) and Code of Criminal Procedure (Section 321), withdrawal can occur for several reasons: (1) out-of-court settlement reached through mediation or negotiation, (2) strategic abandonment when the petitioner recognizes their case is weak or lacks sufficient evidence, or (3) procedural defects in which technical flaws in the filing make the case non-viable.

outcome.

$$\begin{aligned}
z_{icyd} = & \beta_0 + \beta_1 \mathbb{1}\{\text{Petitioner Muslim}_i \times \text{Advocate Muslim}_i \times \text{Judge Identity}_i\} + \\
& \beta_2 \mathbb{1}\{\text{Petitioner Muslim}_i \times \text{Judge Identity}_i\} + \\
& \beta_3 \mathbb{1}\{\text{Advocate Muslim}_i \times \text{Judge Identity}_i\} + \\
& \beta_4 \mathbb{1}\{\text{Petitioner Muslim}_i \times \text{Advocate Muslim}_i\} + \\
& \beta_5 \mathbb{1}\{\text{Petitioner Muslim}_i\} + \beta_6 \mathbb{1}\{\text{Advocate Muslim}_i\} + \beta_7 \mathbb{1}\{\text{Judge Identity}_i\} + \\
& \gamma_c + \alpha_y + \nu_d + \epsilon_{icyd}
\end{aligned} \tag{2}$$

Here  $z_{icyd}$  denotes the status or outcome of case  $i$  of type  $c$  in year  $y$ , and district  $d$ . We consider two groups of outcomes: Case Status (Admitted, Rejected, and Disposed) as well as Case Outcomes (Allowed, Dismissed, and Withdrawn).  $Judge Identity_i$  is a two-dimensional vector, where the first (second) element takes the value 1 whenever the judge first assigned to the case  $i$  is Muslim (High Caste Hindu) and 0 otherwise.  $Petitioner Muslim_i$  and  $Advocate Muslim_i$  are dummy variables taking the value 1 whenever the petitioner and advocate, respectively, are classified as Muslim in a case  $i$ . The main coefficients of interest are  $\beta_1$ ,  $\beta_2$  and  $\beta_3$ .  $\gamma_c$ ,  $\alpha_y$  and  $\nu_d$  measure case type, year, and district fixed effects, respectively. Standard errors are clustered at the district level. We restrict our sample only to first orders of any case and exclude any case where the government is a petitioner.

One challenge in estimating Equation 2 is that some cases (30.51%) in our sample are still pending and resolved cases (69.49%) may not be a random draw from the population. They may differ from pending cases along unobserved attributes. To address this, we use a standard Heckman selection framework. This instrumental variable strategy uses an adaptation of the recently used judge leniency instruments that have been seen in a series of articles (Dobbie, Goldin, and Yang 2018).

Our instrument is the leave-out resolution rate of a judge, which constructs a judge-specific measure of resolution rates excluding the case currently being considered. This measure leverages the propensity of some judges to resolve cases more frequently regardless of case characteristics, allowing us to estimate the impact of judge characteristics on case resolution outcomes. Appendix Tables A3 and A4 present the results of the first stage (selection equation) and the second stage (outcome equation). The instrument is a strong predictor of resolution at the case level; judges with higher resolution rates tend to resolve cases more frequently, regardless of observable case attributes.

Figures 3 and 4 display the key coefficients of interest from estimating Equation 2 for the status of the case and the outcomes, respectively, with complete results in the aforementioned Appendix Tables. Each row presents estimates of  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  for Muslim judges (left panels) and High Caste Hindu judges (right panels). The coefficients shown are for Heckman selection regressions on the full sample (blue circles) and the criminal cases subsample (red squares). The OLS comparisons for a subsample

of these outcomes appear in the Appendix Figures [A5](#) and [A6](#). We discuss these results in detail below.

## **7.2 Case Status Analysis**

### **7.2.1 Muslim Judges**

In-group matching with Muslim judges produces limited benefits for Muslim litigants (Figure 3, left panels). Across all cases (blue circles), homophily between Muslim judges and Muslim petitioners or advocates does not show a statistically significant impact on case admission (top left panel), rejection (middle left panel) or disposal (bottom left panel). The only notable exception occurs in criminal cases, where Muslim advocates matched with Muslim judges experience a 3.8 percentage point higher probability of case disposal (bottom left panel, red square).

Overall, these results indicate that religious matching with Muslim judges does not confer meaningful procedural advantages to Muslim petitioners.

### **7.2.2 High Caste Hindu Judges**

The pattern with High Caste Hindu judges diverges sharply from the null effects observed with Muslim judges (Figure 3, right panels). Muslim petitioners in criminal cases matched with High Caste Hindu judges are 5.9 percentage points more likely to have their cases admitted (top right panel) and 6.2 percentage points more likely to have their cases disposed of (bottom right panel), both significant at the 1% level. These findings suggest High Caste Hindu judges may be actively facilitating case progression for Muslim petitioners in criminal proceedings, resulting in both higher admission rates and more efficient case processing.

However, this favorable procedural treatment of Muslim petitioners coexists with disadvantages for Muslim advocates. Across all types of cases, Muslim advocates appearing before High Caste Hindu judges experience lower admission rates (1.8 percentage points) and disposal rates (1.7 percentage points). When a Muslim advocate represents a Muslim petitioner before a High Caste Hindu judge, the combination of these two identities reduces case rejection by 3.9 percentage points (middle right panel), significant at the 1% level.

However, when examining the overall effect of this three-way interaction—Muslim petitioner selecting a Muslim advocate appearing before a Hindu High Caste judge on other measures of case status, we find no significant net effect on the likelihood of admission or disposal (Appendix Table [A3](#)). For these outcomes, this null result reflects offsetting forces: the favorable procedural treatment that High Caste Hindu judges extend to Muslim petitioners may be counterbalanced by the negative treatment they show toward Muslim advocates.

Appendix Figure A5 presents robustness checks comparing IV and OLS estimates for both the full sample and the closed cases sample, yielding coefficients and confidence intervals consistent with our main IV results.

In summary, matching with High Caste Hindu judges produces some positive impacts on case status for Muslim petitioners in criminal cases, while matching with Muslim judges yields no comparable procedural benefits. However, these advantages for Muslim petitioners are accompanied by some disadvantages for Muslim advocates, creating complex dynamics when both identities are present.

### **7.3 Case Outcome Analysis**

We now turn from procedural case status to substantive case outcomes: whether cases are allowed, dismissed, or withdrawn.

#### **7.3.1 Muslim Judges**

When Muslim petitioners with Muslim advocates appear before Muslim judges, we observe a 4.6 percentage point decrease in the probability that a case is allowed (Figure 4, top left panel, third row; Appendix Table A4), significant at the 5% level. This finding reinforces our earlier observation that religious matching with Muslim judges does not provide advantages and, for case outcomes, even creates a significant disadvantage. OLS estimates (Appendix Figure A6) confirm robustness.

Next, we note that Muslim petitioners matched with Muslim judges experience 3.9 percentage points lower dismissal rates across all cases (Figure 4, middle left panel, second row). However, this protective effect vanishes when a Muslim advocate represents the Muslim petitioner. Here, the coefficient becomes statistically insignificant.

We do not observe significant effects for withdrawals when Muslim petitioners are matched with Muslim judges (Figure 4, middle left panel, second row).

#### **7.3.2 High Caste Hindu Judges**

We see very different results when Muslim petitioners are matched with High Caste Hindu judges. In the cases, Muslim petitioners are 2.5 percentage points more likely to have their cases allowed in the full sample and 7.6 percentage points more likely in criminal cases (Figure 4, top right panel, first row), both statistically significant. This contrasts starkly with the negative effects observed with Muslim judges. In particular, the three-way interaction— Muslim petitioner with Muslim advocate before High Caste Hindu judge—shows no statistically significant effect (top right panel, third row), suggesting that the advantages High Caste Hindu judges extend to Muslim petitioners apply regardless of advocate identity. Unlike petitioners, advocates are repeat players who may have established

professional relationships with judges, which could explain why advocate identity is less prominent in shaping these outcomes.

Next, we examine dismissals. Muslim petitioners experience 3.3 percentage points lower dismissal rates when matched with High Caste Hindu judges across all cases (Figure 4, middle right panel, first row). As with Muslim judges, this advantage vanishes when a Muslim advocate represents the Muslim petitioner—the coefficient becomes statistically insignificant. Moreover, the three-way interaction of Muslim petitioner with Muslim advocate appearing before a High Caste Hindu judge is associated with a 3.4 percentage point *increase* in dismissal likelihood (middle right panel, third row). This mirrors the pattern for allowed cases: benefits for Muslim petitioners are contingent on advocate identity, and the combination of Muslim petitioner and Muslim advocate appears strategically disadvantageous.

Finally, we examine withdrawals. These are case closures initiated by the parties rather than adjudicated by the judge. Here we see that Muslim petitioners matched with High Caste Hindu judges are 3.8 percentage points less likely to withdraw their criminal cases (Figure 4, bottom right panel, first row), significant at the 5% level. No significant effect appears in the entire sample.

This finding warrants careful interpretation. Does the reduced withdrawal rate reflect favorable judicial treatment that encourages Muslim petitioners to continue litigation, or does it reflect case selection through settlement? Under a selection-based explanation, Muslim petitioners who anticipate discrimination from High Caste Hindu judges might settle strong cases out of court, proceeding only with exceptionally strong cases.

Several features of our results make this selection-based explanation implausible. First, withdrawal from criminal appeals requires both the consent of the public procuror and court permission under CrPC Section 321, making strategic settlement substantially more difficult than in civil cases. However, the withdrawal effect appears exclusively in criminal cases ( $-0.038$ ,  $p < 0.05$ ), while the coefficient for all cases is close to zero. If case selection were the primary mechanism, we would expect the opposite pattern: significant effects where settlement is easy and attenuated effects where it is constrained.

Second, if case selection were driving our results, effects should concentrate at the withdrawal margin. Instead, Muslim petitioners matched with High Caste Hindu judges benefit at multiple earlier stages: their criminal cases are more likely to be admitted (5.9 pp) and less likely to be rejected (3.9 pp) before settlement negotiations would typically conclude. These early-stage procedural advantages, combined with improved substantive outcomes (7.6 pp increase in cases allowed), point consistently toward judicial behavior rather than case selection.

Overall, this evidence reveals a striking pattern: Muslim petitioners benefit from matching with High Caste Hindu judges on both procedural and substantive dimensions, while matching with Muslim judges provides no advantages and can be detrimental when combined with Muslim advocate rep-

resentation. These benefits appear to be robust to alternative explanations based on case selection and suggest systematic differences in how judges from different religious backgrounds treat Muslim litigants.

#### 7.4 Dynamic Effects

To estimate the relationship between matching and outcomes over time, we modify Equation 2 by interacting the key explanatory variable, *Petitioner Muslim*  $\times$  *High Caste Hindu Judge*, with year indicators. The estimates are presented in Figure 5 for all cases and Figure A7 for criminal cases. The figures reveal a clear temporal pattern in the full sample: judicial mitigation by High Caste Hindu judges peaked around 2012 and has eroded since. This pattern is most pronounced for cases that are allowed, where the effect is large and statistically significant at the peak but declines thereafter, remaining above zero and significant through the end of our sample period. Similar patterns appear for admission and disposal. The pattern for withdrawals is sharper: the effect peaks around 2012 and drifts toward zero by the end of the sample, suggesting that the reduction in withdrawal rates documented in Section 7.3 is largely a pre-2014 phenomenon. In particular, these temporal dynamics do not appear in criminal cases, where the effects remain relatively stable throughout the sample period.

The erosion of judicial mitigation in the full sample coincides with the rise of Hindu nationalism in India. The wave of nationalist sentiment preceded the BJP's landmark 2014 election victory, with rising anti-Muslim rhetoric and the erosion of secular norms already underway in the early 2010s (Bhargava and Srinivasan 2007; Bhargava 2007; Bose 2018; Varshney 2022). The timing of our results is consistent with this broader trend: the patterns we document peaked just as nationalist politics began to reshape public discourse and weakened thereafter. The absence of the same pattern in criminal cases, where outcomes are also shaped by prosecutorial behavior and state action, warrants further investigation. More work is needed to identify the specific institutional or social mechanisms that might explain these temporal patterns.

### 8 Discussion

Our empirical analysis reveals a nuanced picture of religious disparities within Bihar's High Court. Muslims appear disproportionately represented as defendants in certain criminal case categories while remaining significantly underrepresented as judges and advocates. These findings align with previous studies documenting Muslims' disproportionate presence in Indian prisons and crime statistics (Ahmad and Siddiqui 2017; Vicziany 2024).

One of our most striking findings challenges conventional assumptions about judicial biases. Muslim petitioners do not benefit from having cases heard by judges of their religious group. Rather, they

benefit from matching with High Caste Hindu judges, especially in criminal cases. Furthermore, choosing a Muslim advocate appears to be a disadvantageous strategy for Muslim petitioners. These findings complement and challenge existing scholarship on judicial bias and religious discrimination.

The absence of in-group favoritism among Muslim judges aligns with Forman (2017)'s findings that minority officials sometimes adopt more stringent stances toward their own group, possibly reflecting internalized institutional norms or heightened sensitivity to accusations of bias. However, our results differ from the comprehensive study by Ash, Asher, et al. (2025) that found no evidence of religious bias among Indian judges. This discrepancy may be due to different dynamics at various judicial levels or to regional variation in specific communal relations of Bihar, as summarized in Section 2. Given India's vast size and pronounced regional heterogeneity, our granular analysis of the Patna High Court naturally reveals patterns that may diverge from broader national trends or dynamics observed in higher appellate courts.

What we call "judicial mitigation" by high-caste Hindu judges contrasts with patterns documented in other multiethnic societies. Although Kenyan judges favor co-ethnic appellants (Choi, Harris, and Shen-Bayh 2022; Chen, Graham, et al. 2023) and US federal judges exhibit implicit bias against minorities (Ash, Chen, and Ornaghi 2024), Muslim petitioners matched with high-caste Hindu judges experience outcomes that counterbalance some of the disadvantages documented elsewhere in the system. These patterns parallel institutional efforts such as the UK's 2020-2025 Judicial Diversity Strategy (Ministry of Justice 2023), although the decline since 2014 suggests the fragility of such mitigation without broader institutional support or in the face of changing political pressures.

Again, India's legal pluralism provides a crucial context for understanding these dynamics. Unlike Western legal systems, India's constitution accommodates multiple legal orders through religious-based personal laws, creating spaces where religious identity becomes legally salient (Ghosh and Chakrabarti 2021; Subramanian 2014). This may explain why Muslim petitioners select Muslim advocates despite potentially negative outcomes: religious knowledge is perceived as necessary to navigate the system. In addition, religious identity in India functions as a civil status rather than merely reflecting belief or behavior (Galanter 1997). As noted in the earlier discussion of the context of the Patna High Court, religious inequalities in contexts such as Bihar are often embedded in structures from the colonial era. Moreover, as is the case in many postcolonial societies, it can take time to translate a new secular framework for the protection of minority rights into actual institutional practices (Eberhard and Gupta 2005; Mehta 2007).

Our study has limitations. We lack direct socioeconomic data for litigants, instead relying on names as proxy for identity. This indirect measure may not fully capture the intersections of caste, class, and other factors that shape the judicial outcomes. Furthermore, the disparities we observe may reflect broader systemic patterns rather than bias specific to the high court: differences in initial cases filed,

treatments at lower court levels, and group-specific patterns in pursuing appeals all contribute to the complex chain of judicial outcomes. These issues deserve a much deeper explanation, which we hope will continue in further studies of these regional courts.

In conclusion, our study documents both disparities and patterns consistent with mitigation in the treatment of Muslim petitioners in Bihar's High Court. Our results show that Muslim petitioners experience better outcomes when matched with high-caste Hindu judges. This may not be a form of "minority appeasement," but rather an effort to implement constitutional protections in a system where the path to justice is rarely favorable to Muslims (Ahmad and Siddiqui 2017; Jagannathan, Rai, and Jaffrelot 2022; Basu 2021). Whether this reflects judges' efforts to implement constitutional protections, strategic case selection by litigants, or other mechanisms remains an open question.

These findings contribute to broader conversations about religious discrimination in judicial systems worldwide while illuminating the unique features of India's legal pluralism.

## 9 Conclusion

Drawing on our comprehensive data set of more than 200,000 cases from the Patna High Court (2009-2019), we analyzed religious identities embedded in the names of judicial participants. Our analysis reveals that Muslim petitioners are nearly 30 percentage points more likely than their non-Muslim counterparts to select advocates from their own religious community. However, this religious matching does not extend to judicial assignments, confirming that judge allocation at the point of entry into the High Court remains random with respect to religious identity.

Although the matching between petitioners and judges appears to be random, different types of pairings correlate with different case outcomes. For petitioners with Muslim names, matching with Muslim judges confers some disadvantages in case processing and outcomes. Matching with a judge with a High Caste Hindu name, however, correlates with higher rates of successful decisions. This apparent mitigation occurs in a broader context of low Muslim representation in the courts and also erodes over the sample period. We also find that cases filed by Muslim lawyers on behalf of Muslim petitioners correlate with worse outcomes, although this likely reflects case selection rather than advocate quality.

Our research makes several unique contributions to both postcolonial legal studies and the broader international literature on religious discrimination in legal systems. First, we provide the first large-scale quantitative analysis of religious bias in judicial processes at the regional level, bridging a significant empirical gap between district court studies and Supreme Court analyses. Second, we document a previously undocumented pattern: Muslim petitioners experience better outcomes when matched with High Caste Hindu judges than with Muslim judges. This challenges simplistic narratives about majoritarian bias and reveals a more complex dynamic, though the precise mechanism—whether

judicial behavior, case selection, or other factors—requires further investigation.

Third, our findings on advocate selection and its consequences illuminate an understudied aspect of legal pluralism: how minority litigants navigate a system where shared religious identity with legal representatives may provide cultural fluency, but potentially lead to disadvantageous outcomes. Fourth, our temporal analysis documenting the weakening of these patterns after 2014 offers rare empirical evidence of how case outcomes for minorities may shift during periods of political change.

Finally, our methodological innovation in using machine learning to identify religious identities from names provides a template for future researchers seeking to study discrimination in contexts where direct demographic data are unavailable. These contributions collectively advance our understanding of how religious identity shapes judicial outcomes in pluralistic legal systems, with implications that extend beyond India to other postcolonial societies with similar institutional arrangements.

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## Tables and Figures

Table 1: Summary Statistics

<i>Case Data</i>	N	Mean	SD	Min	Max
Petitioner or Respondent is Government?	224,435	0.784	0.411	0.0	1.0
Petitioner is Government	224,435	0.024	0.152	0.0	1.0
<i>Cases without Government Petitioners</i>					
Criminal Case	204,169	0.320	0.467	0.0	1.0
Petitioner Muslim	204,169	0.098	0.298	0.0	1.0
Advocate Muslim	204,169	0.049	0.216	0.0	1.0
Judge Muslim	204,169	0.090	0.287	0.0	1.0
Judge High Caste	204,169	0.323	0.468	0.0	1.0
Petitioner Muslim X Judge Muslim	204,169	0.009	0.097	0.0	1.0
Advocate Muslim X Judge Muslim	204,169	0.005	0.072	0.0	1.0
Advocate Muslim X Judge High Caste	204,169	0.015	0.121	0.0	1.0
Petitioner Muslim X Advocate Muslim X Judge Muslim	204,169	0.003	0.051	0.0	1.0
Petitioner Muslim X Advocate Muslim X Judge High Caste	204,169	0.009	0.094	0.0	1.0
Pending	204,169	0.311	0.463	0.0	1.0
Decided	204,169	0.689	0.463	0.0	1.0
Admitted	204,169	0.573	0.495	0.0	1.0
Rejected	204,169	0.006	0.074	0.0	1.0
Dismissed	204,169	0.188	0.391	0.0	1.0
Allowed	204,169	0.092	0.288	0.0	1.0
Withdrawn	204,169	0.062	0.240	0.0	1.0
<i>Criminal Cases</i>					
Petitioner Muslim	65,381	0.119	0.323	0.0	1.0
Advocate Muslim	65,381	0.061	0.239	0.0	1.0
Judge Muslim	65,381	0.092	0.290	0.0	1.0
Judge High Caste	65,381	0.140	0.347	0.0	1.0
Petitioner Muslim X Judge Muslim	65,381	0.012	0.107	0.0	1.0
Advocate Muslim X Judge Muslim	65,381	0.007	0.085	0.0	1.0
Advocate Muslim X Judge High Caste	65,381	0.007	0.086	0.0	1.0
Petitioner Muslim X Advocate Muslim X Judge Muslim	65,381	0.003	0.058	0.0	1.0
Petitioner Muslim X Advocate Muslim X Judge High Caste	65,381	0.005	0.071	0.0	1.0
Pending	65,381	0.428	0.495	0.0	1.0
Decided	65,381	0.572	0.495	0.0	1.0
Admitted	65,381	0.515	0.500	0.0	1.0
Rejected	65,381	0.011	0.104	0.0	1.0
Dismissed	65,381	0.179	0.383	0.0	1.0
Allowed	65,381	0.116	0.320	0.0	1.0
Withdrawn	65,381	0.080	0.271	0.0	1.0

Table 2: Muslim Representation in Criminal Cases across Case Types

	Ash et al. (2024) Classifier		Bihar Classifier			
	District Courts			Patna High Court		
	(1)	(2)	(3)	(4)	(5)	(6)
	India - Def	Bihar - Def	Bihar - Def	Bihar - Pet	Def	Pet
Murder	.95	.807	.877	.978	.	.
Sexual assault	1.15	1.1	1.16	1.27	.	.
Violent crimes causing hurt	.994	.824	.887	1.02	.	.
Violent theft/dacoity	1.37	.93	1.07	.944	.	.
Crimes against women	1.36	1.23	1.3	1.47	.	.
Disturbing public health/safety	1.15	.703	.763	.883	.	.
Property crime	1.17	.929	1.05	.98	.	.
Trespassing	1.01	1.1	1.17	1.18	.	.
Marriage offenses	1.62	1.43	1.48	1.65	.	.
Petty theft	1.27	.957	1.12	1.02	.	.
All other crimes	.96	.885	.959	.957	.	.
Total	1.03	.893	.977	.998	1.14	.697
Number of Observations	18,279,972	1,513,658	1,318,901	1,330,928	1,643	59,844

Notes: A comparison of the representation of Muslims in criminal cases relative to their population share. The ratio of Muslim defendants (Def) and petitioners (Pet) is compared to the overall Muslim population share in different courts. Data for columns 1 and 2 come from Ash et al. (2022). Columns 3-6 use our own religion classifier, which was calibrated using Bihar data. Results are presented for: all-India district courts (column 1), Bihar district courts (columns 2-4), and the Patna High Court (columns 5-6).

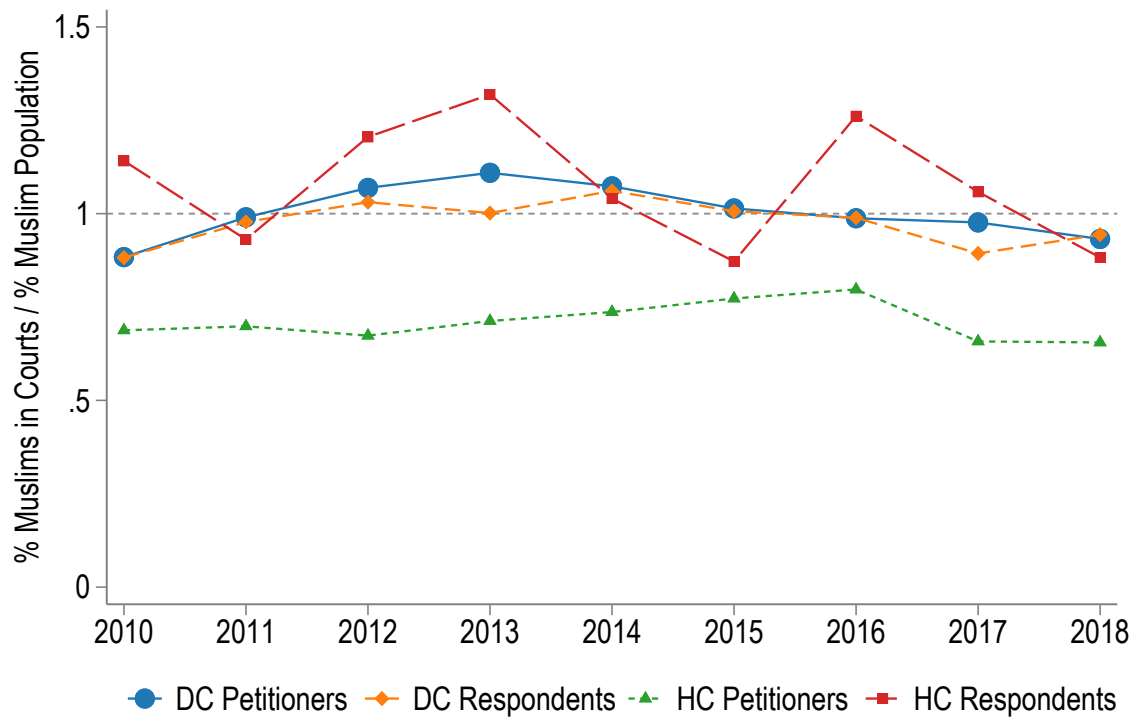


Figure 1: Muslim Representation in Bihar District Courts and Patna High Courts over Time

Notes: This figure displays the evolution over time of the relative shares of Muslim petitioners and respondents in criminal cases in Bihar’s district courts and the Patna High Court compared to the state’s overall Muslim population. The denominator is the Muslim share in the population of Bihar in 2011.

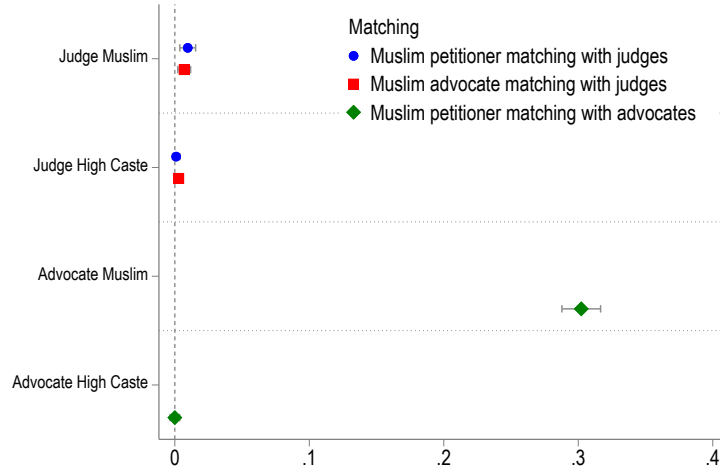


Figure 2: Litigant and Judge Matching

Notes: (i) Sample includes only judges from the first observable order of a case; (ii) All regressions control for the age of the judge, if the judge pursued their career in the supreme court, the number of years the judge had a permanent position in the Patna High Court, and year, case type and district fixed effects; (iii) Standard errors are clustered at the district-year level; (iv) Confidence intervals correspond to 5% statistical significance.

Table 3: Balance Tests: Muslim Petitioner Status and Judge Characteristics

	Judge Characteristics				
	(1) Age	(2) Bar	(3) Transferred	(4) Yrs at Court	(5) Yrs Permanent
Muslim Petitioner	0.006 (0.031)	-0.002 (0.004)	-0.003 (0.003)	-0.047 (0.031)	0.007 (0.021)
District FE	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓
Case Type FE	✓	✓	✓	✓	✓
N	193,794	193,794	193,794	193,794	193,794
$R^2$	0.054	0.169	0.015	0.081	0.104
Joint F-statistic					0.73
Joint p-value					0.600

Notes: (i) Each column reports the coefficient from a separate regression of a pre-determined judge characteristic on a Muslim petitioner indicator; (ii) All regressions control for district, year, and case type fixed effects; (iii) Standard errors are clustered at the district-year level; (iv) The joint F-statistic tests whether Muslim petitioner status predicts all five judge characteristics simultaneously, constructed as the sum of squared  $t$ -statistics divided by degrees of freedom; this is a conservative test that ignores cross-equation correlation; (v)  $^+ p < 0.10$ ,  $* p < 0.05$ ,  $** p < 0.01$ .

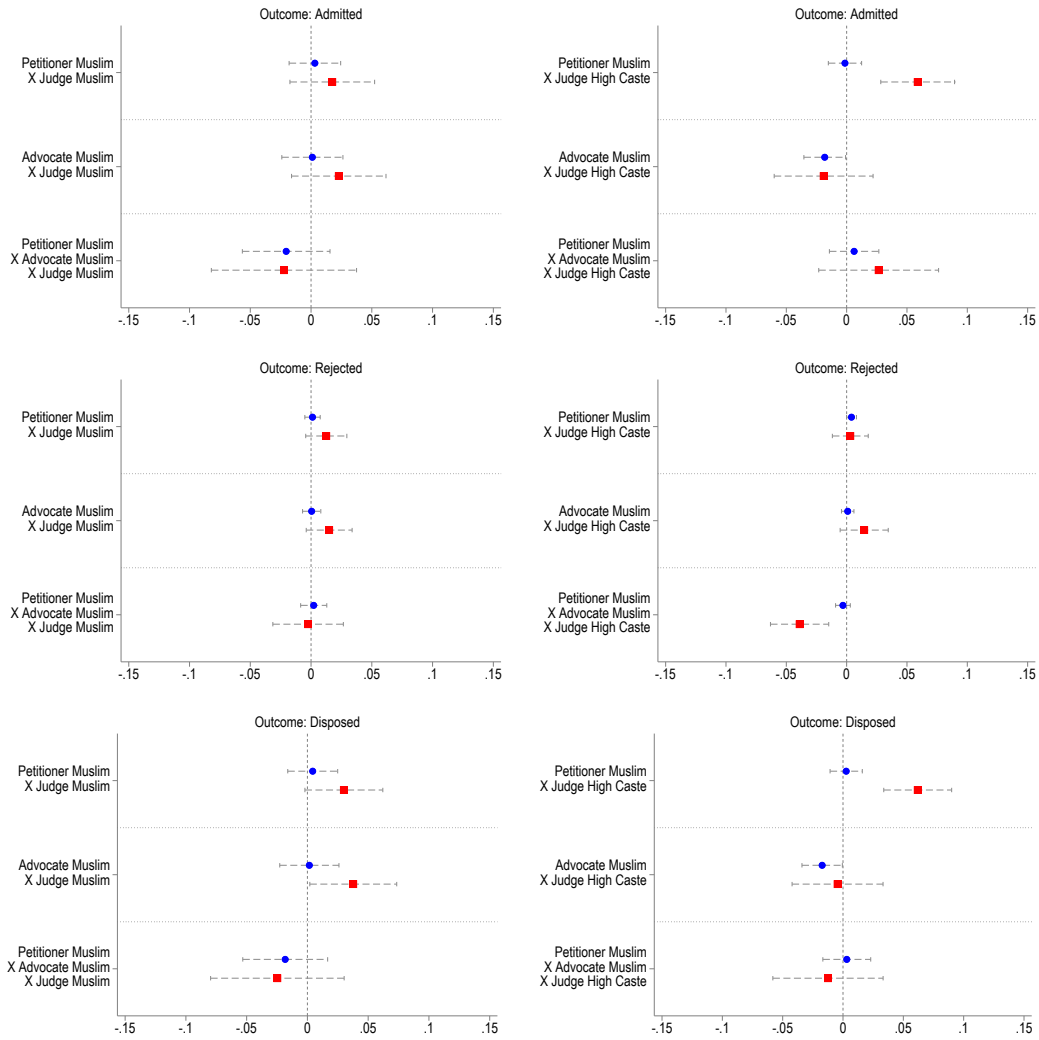


Figure 3: Case Status: Admitted (top panel), Rejected (middle panel) and Disposed (bottom panel).

Notes: (i) Blue circles are coefficients from regressions that include all cases; Red squares are coefficients from regressions with only criminal cases; (ii) The left panel presents regression results for matches among Muslims. The right panel showcases matches between Muslims and High Caste Hindu participants; (iii) The first step of the two-step Heckman selection model is estimated on the basis of upto three judges on each case panel; (iv) All regressions control for district, year and the type of case fixed-effects; (v) Standard errors are clustered at district and year level; (vi) Confidence intervals correspond to 5% statistical significance.

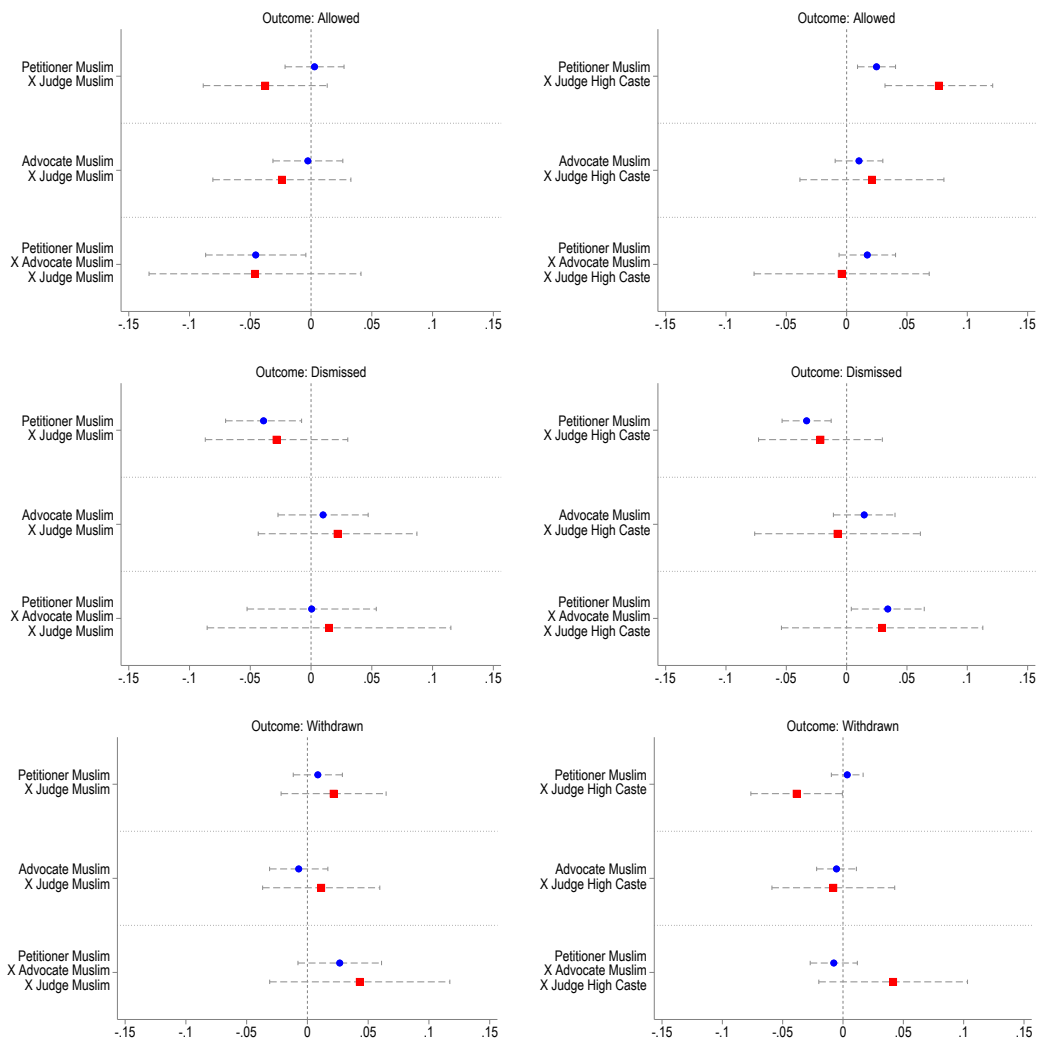


Figure 4: Case Outcomes: Allowed (top panel), Dismissed (middle panel) and Withdrawn (bottom panel)

Notes from Figure 3 apply.

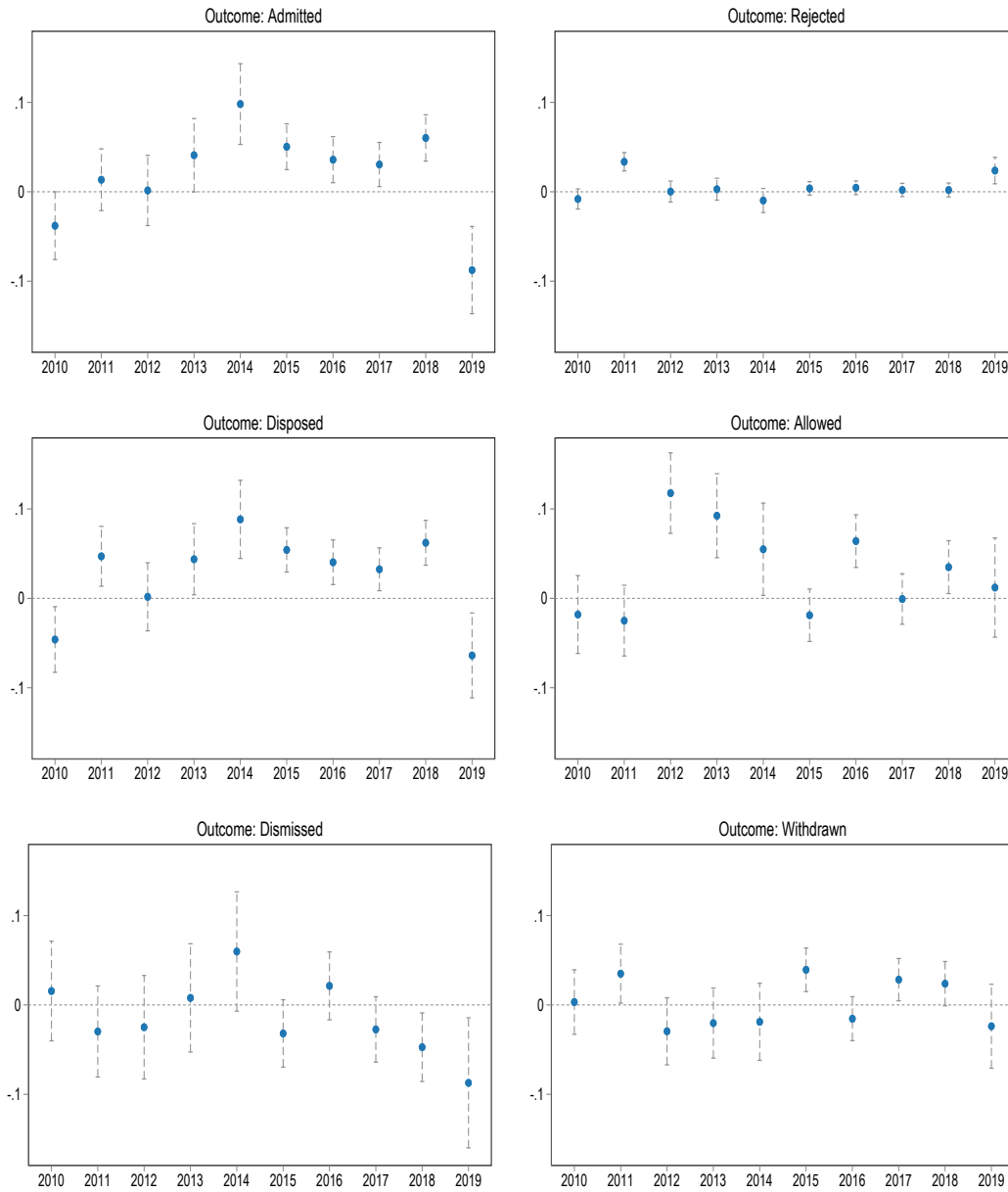


Figure 5: Dynamic Effects: Muslim Petitioners Matched to High Caste Judges (All Cases)

Notes: (i) Blue circles are coefficients from regressions that include all cases; (ii) The first step of the two-step Heckman selection model is estimated on the basis of up to three judges on each case panel; (vi) All regressions control for district, year and the type of case fixed-effects; (vii) Standard errors are clustered at district and year level; (viii) Confidence intervals correspond to 5% statistical significance.

## Appendix Tables and Figures

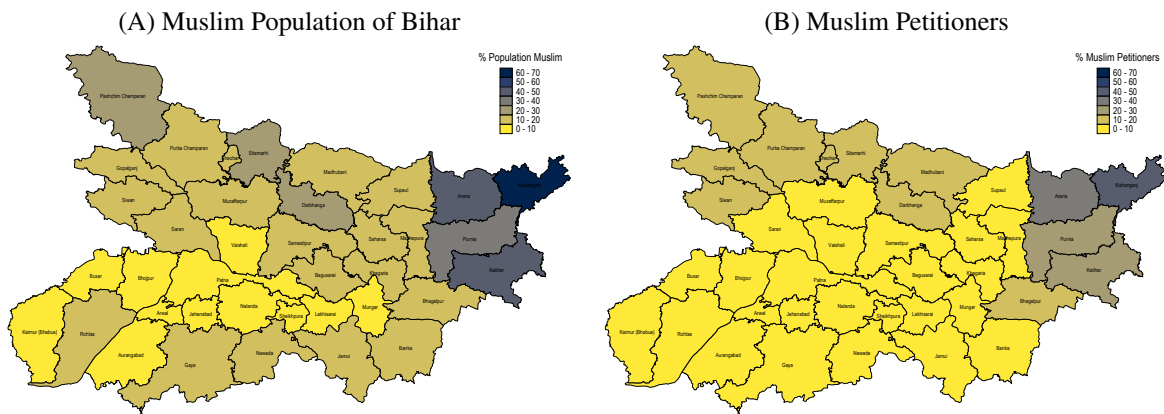


Figure A1: Spatial Distribution of Bihar's Muslim Population Share and Muslim Representation in Cases filed at the Patna High Court, 2009-2019

Note: Panel (A) displays the share of Muslim population in Bihar per district in 2011. Panel (B) displays the share of Muslim petitioners per district in cases filed in the Patna High Court between 2009 and 2019.

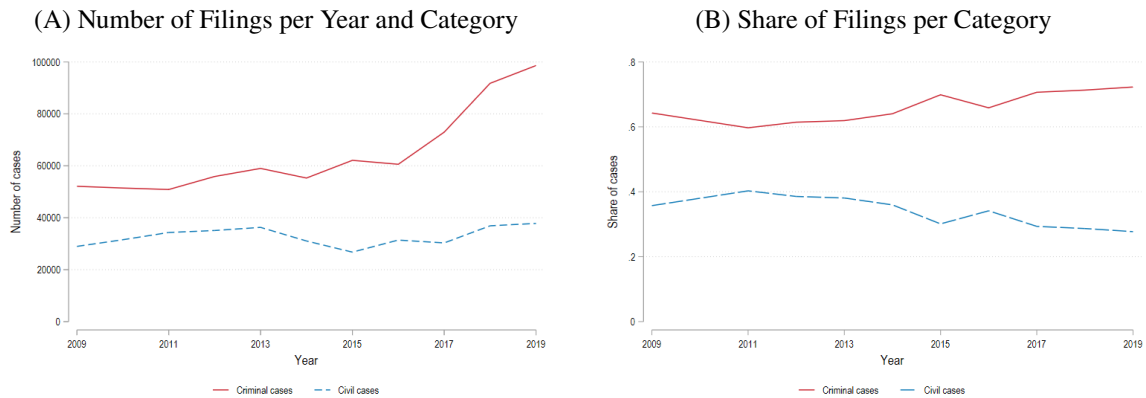


Figure A2: Time Trends of Criminal and Civil Cases Filed at the Patna High Court, 2009-2019

Note: The figure depicts time trends of the number (Panel A) and share (Panel B) of civil and criminal cases filed per year in the Patna High Court between 2009 and 2019. Calculations are based on the full sample of 1,071,068 cases filed in this time period.

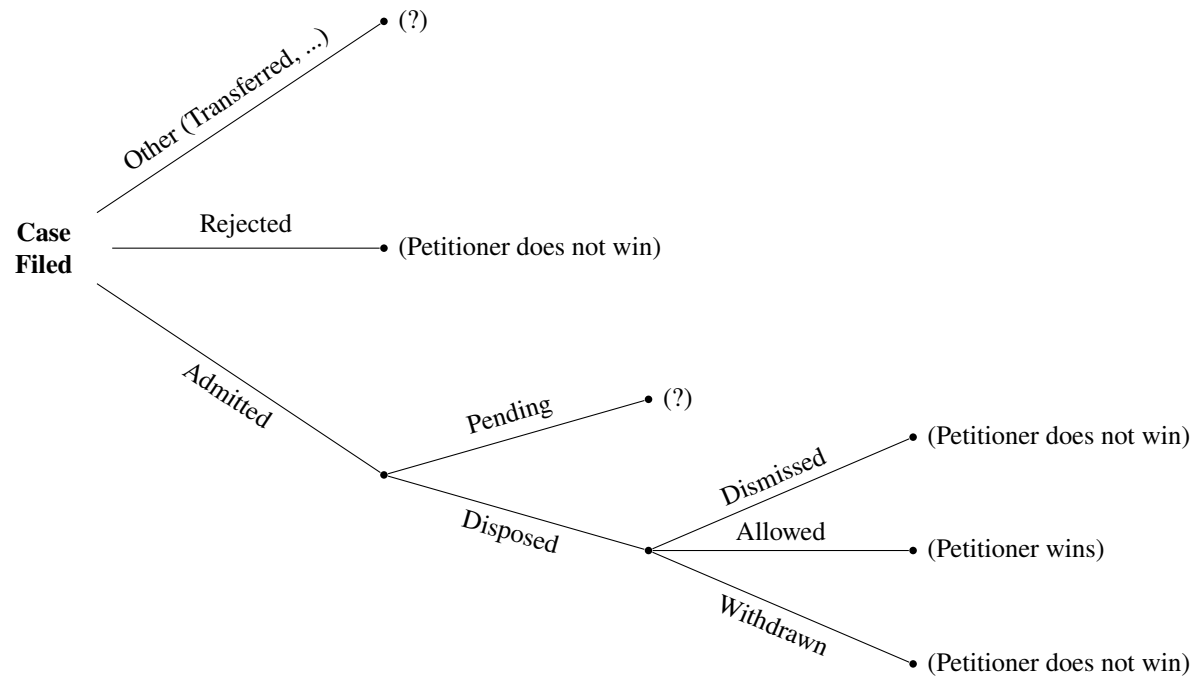


Figure A3: Decision Tree for Cases Filed at the Patna High Court

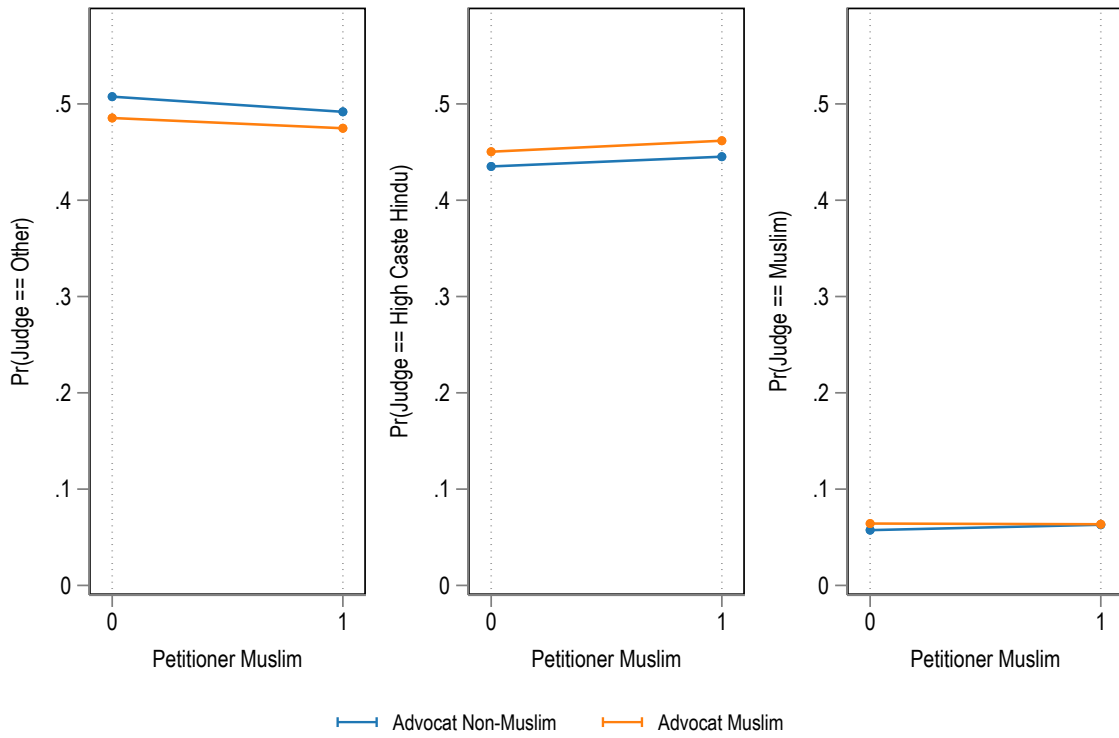


Figure A4: Predicted Probabilities of Judge Identity by Petitioner and Advocate Identity

Notes: This figure displays adjusted predicted probabilities of judges' identities depending on petitioners and petitioners' advocate's identities. Predictions are based on a multinomial logit regression, where the judge identity (High Caste Hindu, Muslim, Other) is regressed on a dummy variable equal to one if the petitioner is Muslim, a dummy variable equal to one if the petitioner's advocate is Muslim, an interaction between these two dummy variables, and year, district and case type fixed effects. Predictions are made at the means of the explanatory variables.

Table A1: Balance Tests: Muslim Advocate Status and Judge Characteristics

	Judge Characteristics				
	(1) Age	(2) Bar	(3) Transferred	(4) Yrs at Court	(5) Yrs Permanent
Muslim Advocate	0.118** (0.042)	-0.011* (0.005)	0.003 (0.004)	0.130** (0.044)	0.070* (0.031)
District FE	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓
Case Type FE	✓	✓	✓	✓	✓
N	207,814	207,814	207,814	207,814	207,814
$R^2$	0.051	0.167	0.016	0.073	0.103
Joint F-statistic					5.62
Joint p-value					0.000

Notes: (i) Each column reports the coefficient from a separate regression of a pre-determined judge characteristic on a Muslim advocate indicator; (ii) Unlike petitioner identity, advocate selection is endogenous—petitioners choose their own advocates—so balance on judge characteristics is not expected; (iii) All regressions control for district, year, and case type fixed effects; (iv) Standard errors are clustered at the district-year level; (v) The joint F-statistic is constructed as in Table 3; (vi) <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ .

Table A2: Judge Identity by Petitioner and Petitioner’s Advocate Identity: OLS Results

	(1) Judge High Caste	(2) Judge Muslim
Petitioner Muslim	0.00893** (0.00227)	0.00619** (0.00117)
Advocate Muslim	0.0139** (0.00348)	0.00728** (0.00180)
Petitioner Muslim x Advocate Muslim	0.00155 (0.00579)	-0.00681* (0.00300)
District FE	✓	✓
Year FE	✓	✓
Case Type FE	✓	✓
N	669,508	659,277

This Table presents estimates from regressing a dummy variable representing judge’s identity (High Caste in column 1 and Muslim in column 2) on a dummy variable equal to one if the petitioner is Muslim, a dummy variable equal to one if the petitioner’s advocate is Muslim, an interaction between these two dummy variables, and year, district and case type fixed effects.

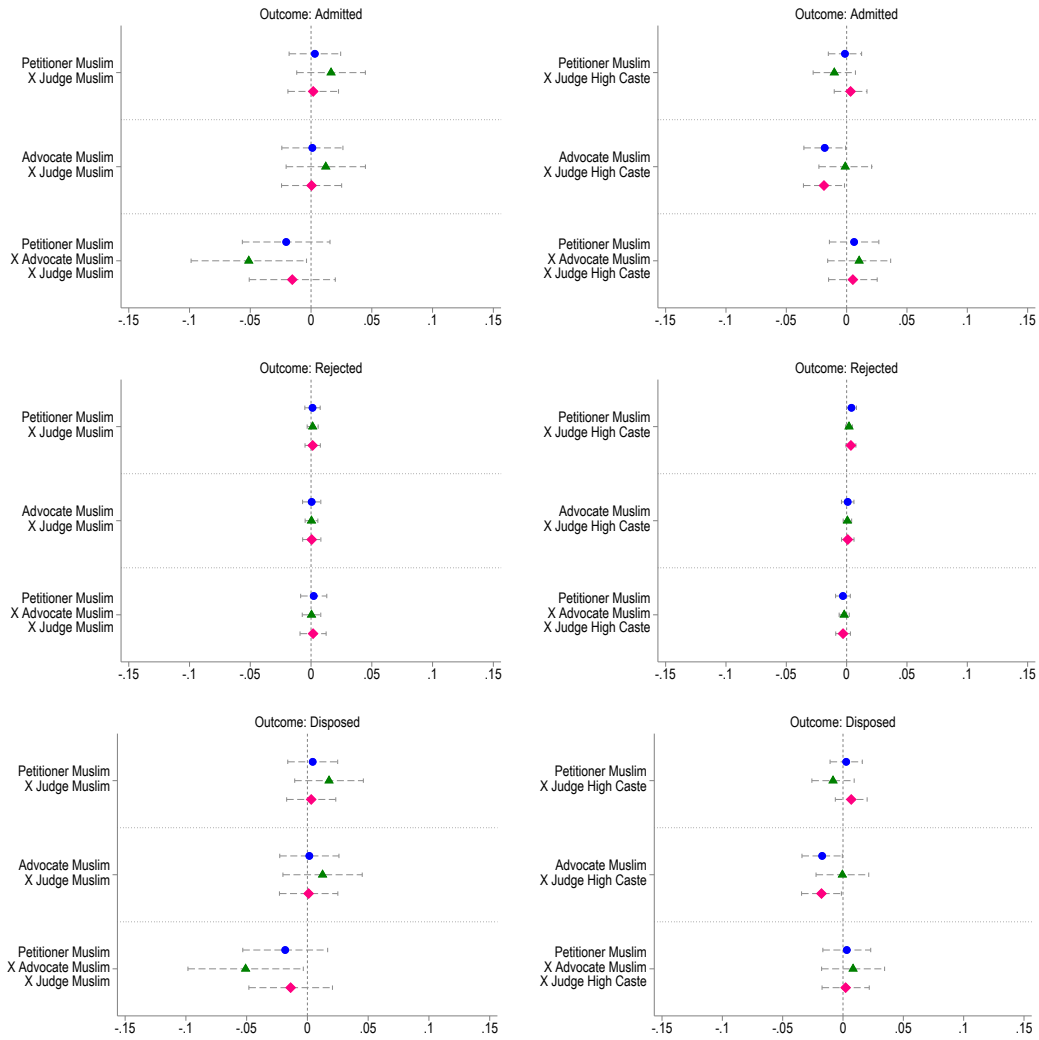


Figure A5: Comparison of OLS and IV estimates for Case Status: Admitted (top panel), Rejected (middle panel) and Disposed (bottom panel).

Notes: (i) Blue circles are coefficients from Heckman regressions; Green triangles are coefficients from OLS regressions; Pink diamonds are coefficients from OLS regressions on decided cases only; (ii) The left panel presents regression results for matches among Muslims. The right panel showcases matches between Muslims and High Caste Hindu Judges; (iii) Regressions featuring judges are based on the first observed order for a specific court case; (iv) Definition of judge identity is based on any judge on the bench with that identity; (v) The first step of the two-step Heckman selection model is estimated on the basis of upto three judges on each case panel; (vi) All regressions control for district, year and the type of case fixed-effects; (vii) Standard errors are clustered at district and year level; (viii) Confidence intervals correspond to 5% statistical significance.

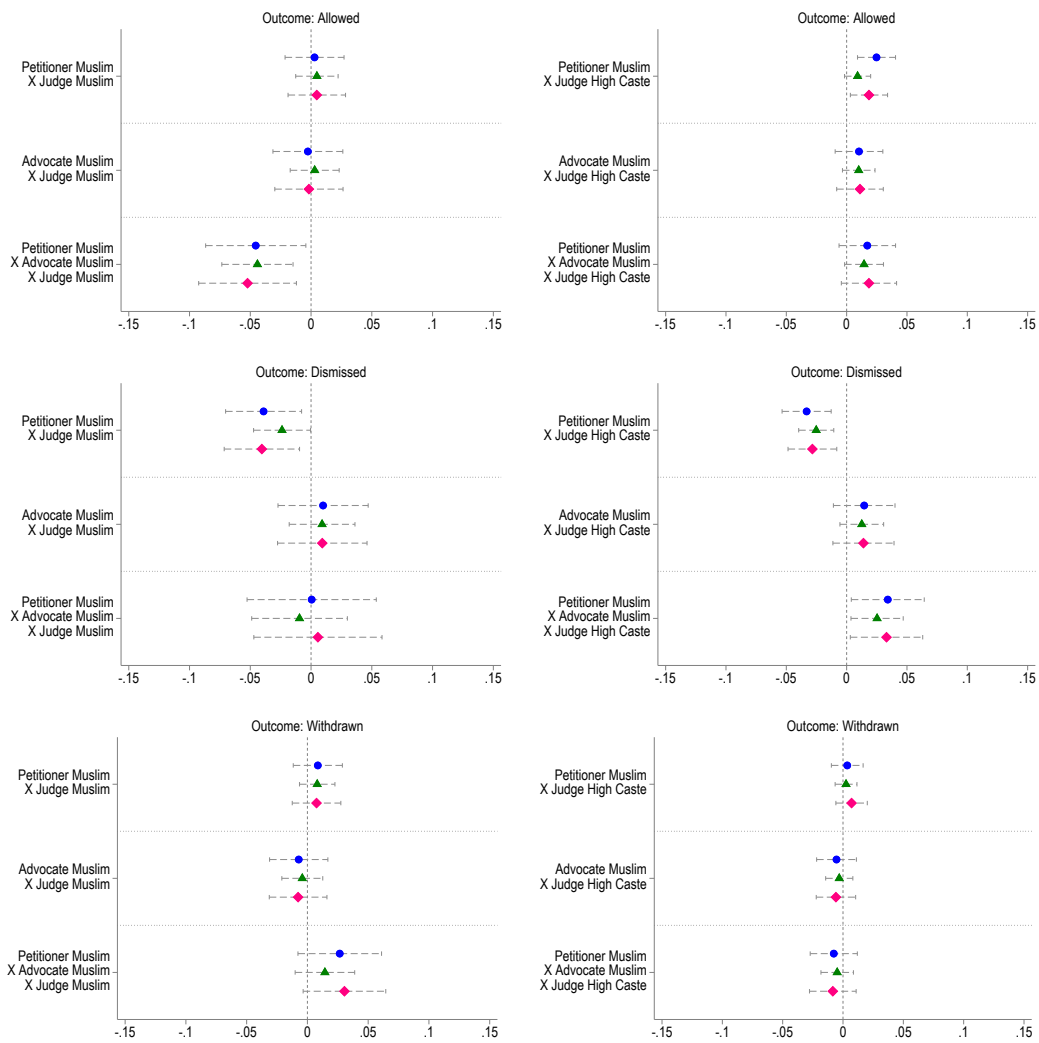


Figure A6: Comparison of OLS and IV estimates for three measures of case outcomes: Allowed (top panel), Dismissed (middle panel) and Withdrawn (bottom panel).

Notes from Figure A5 apply.

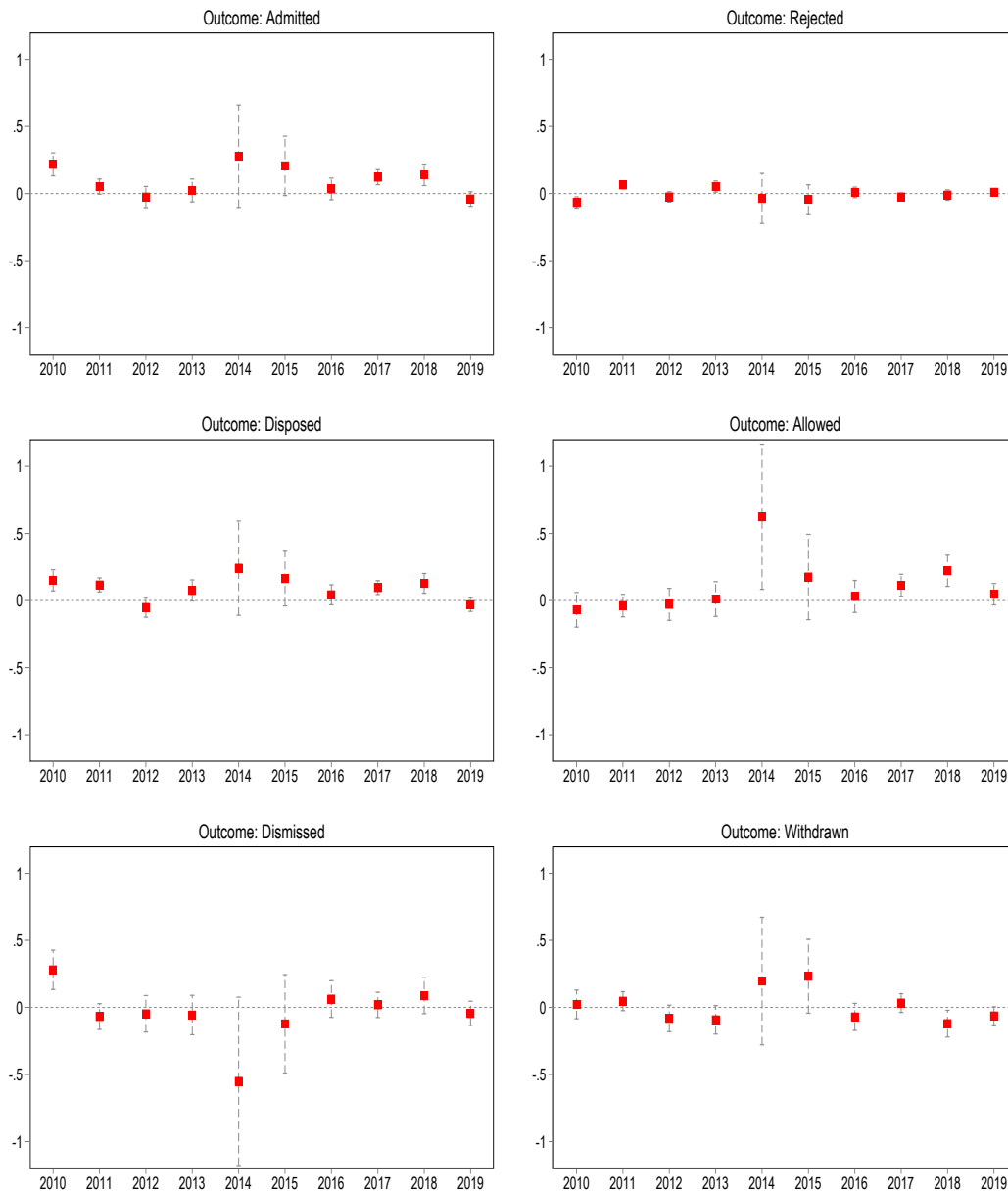


Figure A7: Dynamic Effects: Muslim Petitioners Matched to High Caste Judges (Criminal Cases)

Notes: (i) Red circles are coefficients from regressions that include only criminal cases; (ii) The first step of the two-step Heckman selection model is estimated on the basis of up to three judges on each case panel; (vi) All regressions control for district, year and the type of case fixed-effects; (vii) Standard errors are clustered at district and year level; (viii) Confidence intervals correspond to 5% statistical significance.

Table A3: Muslim Petitioners and Advocates matching with Judges: Case Status

	Admitted		Rejected		Disposed	
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Criminal	All	Criminal	All	Criminal
<b>Main Specification</b>						
Petitioner Muslim X Judge Muslim	0.00314 (0.0108)	0.0175 (0.0178)	0.00121 (0.00323)	0.0125 (0.00863)	0.00435 (0.0105)	0.0300+ (0.0164)
Advocate Muslim X Judge Muslim	0.00108 (0.0128)	0.0228 (0.0198)	0.000509 (0.00383)	0.0149 (0.00963)	0.00159 (0.0124)	0.0377* (0.0182)
Petitioner Muslim X Advocate Muslim X Judge Muslim	-0.0205 (0.0184)	-0.0223 (0.0305)	0.00218 (0.00549)	-0.00242 (0.0148)	-0.0183 (0.0178)	-0.0247 (0.0280)
Judge Muslim	0.00904** (0.00298)	-0.0139* (0.00574)	0.00297** (0.000890)	0.000400 (0.00279)	0.0120** (0.00289)	-0.0135* (0.00528)
Petitioner Muslim X Judge High Caste	-0.00138 (0.00703)	0.0589** (0.0156)	0.00402+ (0.00210)	0.00304 (0.00758)	0.00264 (0.00681)	0.0619** (0.0144)
Advocate Muslim X Judge High Caste	-0.0182* (0.00882)	-0.0191 (0.0209)	0.000887 (0.00263)	0.0146 (0.0102)	-0.0173* (0.00854)	-0.00452 (0.0192)
Petitioner Muslim X Advocate Muslim X Judge High Caste	0.00620 (0.0104)	0.0265 (0.0253)	-0.00307 (0.00312)	-0.0390** (0.0123)	0.00313 (0.0101)	-0.0125 (0.0233)
Judge High Caste	-0.0268** (0.00190)	-0.183** (0.00486)	0.00670** (0.000577)	0.0628** (0.00238)	-0.0201** (0.00185)	-0.120** (0.00447)
Advocate Muslim X Petitioner Muslim	-0.00200 (0.00810)	0.00304 (0.0132)	0.00396 (0.00242)	0.0114+ (0.00640)	0.00196 (0.00784)	0.0144 (0.0121)
Advocate Muslim	0.00585 (0.00594)	-0.000827 (0.00891)	-0.00250 (0.00178)	-0.00732+ (0.00433)	0.00335 (0.00576)	-0.00815 (0.00819)
Petitioner Muslim	0.00695+ (0.00384)	-0.00280 (0.00551)	-0.00135 (0.00115)	-0.00303 (0.00268)	0.00560 (0.00372)	-0.00583 (0.00507)
<b>First Stage</b>						
Judges' Leave-out Resolution Rate	6.679** (0.0571)	5.101** (0.0660)	6.679** (0.0571)	5.101** (0.0660)	6.679** (0.0571)	5.101** (0.0660)
Petitioner Muslim X Judge Muslim	0.00413 (0.0439)	0.0508 (0.0652)	0.00413 (0.0439)	0.0508 (0.0652)	0.00413 (0.0439)	0.0508 (0.0652)
Advocate Muslim X Judge Muslim	0.00416 (0.0497)	0.123+ (0.0697)	0.00416 (0.0497)	0.123+ (0.0697)	0.00416 (0.0497)	0.123+ (0.0697)
Petitioner Muslim X Advocate Muslim X Judge Muslim	-0.0940 (0.0728)	-0.185+ (0.106)	-0.0940 (0.0728)	-0.185+ (0.106)	-0.0940 (0.0728)	-0.185+ (0.106)
Judge Muslim	0.0637** (0.0118)	-0.150** (0.0196)	0.0637** (0.0118)	-0.150** (0.0196)	0.0637** (0.0118)	-0.150** (0.0196)
Petitioner Muslim X Judge High Caste	-0.113** (0.0262)	-0.183** (0.0534)	-0.113** (0.0262)	-0.183** (0.0534)	-0.113** (0.0262)	-0.183** (0.0534)
Advocate Muslim X Judge High Caste	-0.00113 (0.0330)	-0.0999 (0.0687)	-0.00113 (0.0330)	-0.0999 (0.0687)	-0.00113 (0.0330)	-0.0999 (0.0687)
Petitioner Muslim X Advocate Muslim X Judge High Caste	0.00629 (0.0399)	0.0538 (0.0895)	0.00629 (0.0399)	0.0538 (0.0895)	0.00629 (0.0399)	0.0538 (0.0895)
Advocate Muslim X Petitioner Muslim	0.115** (0.0309)	0.205** (0.0473)	0.115** (0.0309)	0.205** (0.0473)	0.115** (0.0309)	0.205** (0.0473)
Advocate Muslim	-0.109** (0.0218)	-0.198** (0.0302)	-0.109** (0.0218)	-0.198** (0.0302)	-0.109** (0.0218)	-0.198** (0.0302)
Petitioner Muslim	0.0596** (0.0146)	0.0894** (0.0204)	0.0596** (0.0146)	0.0894** (0.0204)	0.0596** (0.0146)	0.0894** (0.0204)
Advocate Muslim Overall	-0.028	0.010	0.002	-0.008	-0.026	0.002
Advocate Muslim Overall p-value	0.346	0.851	0.821	0.765	0.367	0.964
Advocate Muslim Overall (Muslim Judges)	-0.016	0.003	0.004	0.017	-0.011	0.019
Advocate Muslim Overall (Muslim Judges) p-value	0.529	0.947	0.573	0.401	0.634	0.606
Advocate Muslim Overall (HC Judges)	-0.008	0.010	-0.001	-0.020	-0.009	-0.011
Advocate Muslim Overall (HC Judges) p-value	0.596	0.789	0.875	0.246	0.552	0.747
Case Type FE	✓		✓		✓	
N	204,169	65,381	204,169	65,381	204,169	65,381

Notes: (i) Regressions featuring judges are based on the first observed order for a specific court case; (ii) Definition of judge identity is based on any judge on the bench with that identity; (iii) The first step of the two-step Heckman selection model is estimated on the basis of upto three judges on each case panel; (iv) All regressions control for district and year fixed-effects; (v) Standard errors are clustered at district and year level.

Table A4: Muslim Petitioners and Advocates matching with Judges: Case Outcomes

	Allowed		Dismissed		Withdrawn	
	(1) All	(2) Criminal	(3) All	(4) Criminal	(5) All	(6) Criminal
<b>Main Specification</b>						
Petitioner Muslim X Judge Muslim	0.00288 (0.0124)	-0.0377 (0.0260)	-0.0391* (0.0160)	-0.0284 (0.0299)	0.00857 (0.0103)	0.0216 (0.0220)
Advocate Muslim X Judge Muslim	-0.00262 (0.0147)	-0.0240 (0.0290)	0.00990 (0.0189)	0.0218 (0.0333)	-0.00716 (0.0122)	0.0113 (0.0246)
Petitioner Muslim X Advocate Muslim X Judge Muslim	-0.0455* (0.0210)	-0.0461 (0.0445)	0.000516 (0.0271)	0.0148 (0.0512)	0.0266 (0.0175)	0.0431 (0.0378)
Judge Muslim	-0.0368** (0.00341)	0.0244** (0.00837)	0.00501 (0.00440)	-0.0520** (0.00963)	0.0180** (0.00284)	-0.0236** (0.00712)
Petitioner Muslim X Judge High Caste	0.0248** (0.00803)	0.0764** (0.0228)	-0.0332** (0.0104)	-0.0217 (0.0262)	0.00351 (0.00671)	-0.0384* (0.0194)
Advocate Muslim X Judge High Caste	0.0102 (0.0101)	0.0209 (0.0304)	0.0146 (0.0130)	-0.00755 (0.0350)	-0.00538 (0.00841)	-0.00803 (0.0260)
Petitioner Muslim X Advocate Muslim X Judge High Caste	0.0171 (0.0119)	-0.00414 (0.0370)	0.0341* (0.0154)	0.0294 (0.0426)	-0.00764 (0.00997)	0.0416 (0.0314)
Judge High Caste	-0.0273** (0.00216)	-0.0919** (0.00692)	-0.00348 (0.00283)	-0.0594** (0.00802)	0.0253** (0.00182)	0.0867** (0.00605)
Advocate Muslim X Petitioner Muslim	-0.0247** (0.00926)	-0.0738** (0.0193)	0.0262* (0.0120)	0.0673** (0.0221)	-0.00131 (0.00772)	-0.00234 (0.0163)
Advocate Muslim	0.0178** (0.00679)	0.0477** (0.0130)	0.00177 (0.00878)	-0.0194 (0.0149)	-0.00824 (0.00567)	-0.0106 (0.0111)
Petitioner Muslim	-0.00790+ (0.00438)	-0.0245** (0.00808)	0.0260** (0.00566)	0.0358** (0.00928)	0.00653+ (0.00366)	0.00706 (0.00684)
<b>First Stage</b>						
Judges' Leave-out Resolution Rate	6.679** (0.0571)	5.101** (0.0660)	6.679** (0.0571)	5.101** (0.0660)	6.679** (0.0571)	5.101** (0.0660)
Petitioner Muslim X Judge Muslim	0.00413 (0.0439)	0.0508 (0.0652)	0.00413 (0.0439)	0.0508 (0.0652)	0.00413 (0.0439)	0.0508 (0.0652)
Advocate Muslim X Judge Muslim	0.00416 (0.0497)	0.123+ (0.0697)	0.00416 (0.0497)	0.123+ (0.0697)	0.00416 (0.0497)	0.123+ (0.0697)
Petitioner Muslim X Advocate Muslim X Judge Muslim	-0.0940 (0.0728)	-0.185+ (0.106)	-0.0940 (0.0728)	-0.185+ (0.106)	-0.0940 (0.0728)	-0.185+ (0.106)
Judge Muslim	0.0637** (0.0118)	-0.150** (0.0196)	0.0637** (0.0118)	-0.150** (0.0196)	0.0637** (0.0118)	-0.150** (0.0196)
Petitioner Muslim X Judge High Caste	-0.113** (0.0262)	-0.183** (0.0534)	-0.113** (0.0262)	-0.183** (0.0534)	-0.113** (0.0262)	-0.183** (0.0534)
Advocate Muslim X Judge High Caste	-0.00113 (0.0330)	-0.0999 (0.0687)	-0.00113 (0.0330)	-0.0999 (0.0687)	-0.00113 (0.0330)	-0.0999 (0.0687)
Petitioner Muslim X Advocate Muslim X Judge High Caste	0.00629 (0.0399)	0.0538 (0.0895)	0.00629 (0.0399)	0.0538 (0.0895)	0.00629 (0.0399)	0.0538 (0.0895)
Advocate Muslim X Petitioner Muslim	0.115** (0.0309)	0.205** (0.0473)	0.115** (0.0309)	0.205** (0.0473)	0.115** (0.0309)	0.205** (0.0473)
Advocate Muslim	-0.109** (0.0218)	-0.198** (0.0302)	-0.109** (0.0218)	-0.198** (0.0302)	-0.109** (0.0218)	-0.198** (0.0302)
Petitioner Muslim	0.0596** (0.0146)	0.0894** (0.0204)	0.0596** (0.0146)	0.0894** (0.0204)	0.0596** (0.0146)	0.0894** (0.0204)
Advocate Muslim Overall	-0.028	-0.079	0.087	0.106	-0.003	0.075
Advocate Muslim Overall p-value	0.408	0.316	0.043	0.243	0.911	0.265
Advocate Muslim Overall (Muslim Judges)	-0.055	-0.096	0.038	0.084	0.010	0.042
Advocate Muslim Overall (Muslim Judges) p-value	0.052	0.104	0.293	0.214	0.675	0.409
Advocate Muslim Overall (HC Judges)	0.020	-0.009	0.077	0.070	-0.023	0.021
Advocate Muslim Overall (HC Judges) p-value	0.242	0.859	0.001	0.251	0.123	0.646
Case Type FE	✓		✓		✓	
N	204,169	65,381	204,169	65,381	204,169	65,381

Notes from Table A3 apply.