

# RELIGION, POLITICS, AND JUDICIAL INDEPENDENCE: THEORY AND EVIDENCE\*

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## Abstract

Most enlightenment philosophers argued that the separation between Church and State would prevent capture of resources by one state religion. We formalize and test a theory that addresses a different danger. We demonstrate that a reduction in the separation between Church and State can be corrosive to political institutions, especially the Judiciary. We show that religious leaders use their high legitimacy to gain political office, and become particularly abusive politicians, misusing their political authority to undermine the independence of the Judiciary. We provide a theoretical framework and estimate the structural equations of our theory using data from Pakistan. Our empirical strategy exploits the plausibly exogenous timing of a military coup to provide causal evidence for the key predictions of our theory.

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*In all times and places experience has shown the danger of the altar being next to the throne.*

*Priests are even more unreliable than magistrates as keepers of the laws. Nowhere in the world has it been possible without violence to reduce them to the pure and simple status of a citizen. Often they have had the nerve to say, as they have never ceased to think, that they were answerable only to God. Everywhere they have claimed a special jurisdiction, everywhere they have maintained the right to make or break an oath. To permit them that right is to give in to their claims. One cannot have too low an opinion of a race of men who sanctify crime when it pleases them. One cannot be too mistrustful of a race of men who alone have kept the royal privilege of speaking to the assembled people, in the name of the Lord of the universe.*

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Denis Diderot, Political Writings

## 1 Introduction

The separation of Church and State is one of the most prominent features of modern democratic constitutions. Yet in many countries, state religions still prevail, and [Jefferson’s \(1802\)](#) “wall of separation between Church and State” crumbles or strengthens with the evolution of State and society ([Barro and McCleary \(2006\)](#)).

Its early proponents such as Locke, Montesquieu, and Madison, believed that the separation of Church and State would prevent capture of resources by one religion. In this paper, we identify a different threat posed by mixing religion and politics. Our key findings echo Diderot’s quote, with which we started. We demonstrate that a reduced separation between Church and State can be especially corrosive to the functioning of State institutions. When religious leaders use their high legitimacy to gain political office, their revered status makes them particularly crooked politicians. This profoundly affects the functioning of the State. We identify one key channel through which this operates: the independence of the Judiciary.

We both provide a theoretical framework and estimate the structural equations of our theory through a natural experiment in Pakistan. In the model, secular politicians

and religious leaders decide whether or not to run for elections. They also choose the quality of the platforms they will implement if elected. People vote based on their own characteristics, the quality of the political platforms, and the religious legitimacy of the candidates. We provide an analytical solution for the Nash equilibrium. The model is then used to predict how the presence of religious elites at the local level affects the structure of political competition and the level of resources expropriated by elected politicians. In particular, we study how the structure of political competition affects the pressure exerted by secular and religious politicians on the Judiciary.

We establish four main results. First, religious leaders are more likely to become politicians in places where they enjoy greater legitimacy. In such places, religious politicians exert more pressure on the Judiciary than their secular counterparts. Second, we show that religious leaders as politicians only impact judicial cases where there are valuable resources to be captured. Third, we demonstrate that reducing the separation between Church and State entrenches autocrats. When the separation between Church and State is weak, autocrats decentralize political institutions by holding local elections that effectively invite the local religious elite to the political table. In so doing, autocrats ensure the rise of a new religious political elite that supports them and can free-ride on its heightened legitimacy to extract resources, and to tighten its grasp on power.<sup>1</sup> Finally, we show that bending judicial decisions in favor of religious leaders leads to a fall in the quality of judicial decisions.<sup>2</sup>

The empirical analysis is based on the structural equations of the model. The theory is applied to the case of Pakistan, the second largest Muslim-majority country in the world, with a population of over 220 million. As in many Muslim-majority countries, the Judiciary is instrumentalized by politicians to extract resources. Religion plays a central role in everyday life in Pakistan (Coulson (1964), Fair, Littman and Nugent (2018)). In particular, historical religious sites like the holy Muslim shrines continue to play a critical role in the institutional and social order in contemporary Pakistan. Shrine leaders are believed to be direct descendants of the Prophet Muhammad of Islam, and are revered for their sacred lineage. The local population applies to shrine leaders for divine intercession and for council on various personal, political, and social issues. Hence, when these shrine leaders run for

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<sup>1</sup>The paradox of autocratic regimes holding local elections is widespread across the Muslim world: Indonesia under Suharto, Saudi Arabia under Abdullah and Yemen under Saleh are just a few examples (see Martinez-Bravo et al. (2017) for a discussion).

<sup>2</sup>This is because threats to judges reduce effort: even biased judges may be pushed to bend their judicial decisions beyond their preferred levels.

election, the allegiance of the shrine devotees ensures them a stable constituency of voters that can potentially be captured.

To test the key predictions of the theory, we collect unique data sets on 13<sup>th</sup> century holy Muslim shrines across Pakistan and case-level micro data on cases adjudicated in the district high courts. To measure judicial independence, we construct a variable called State Wins as a proxy for judicial independence. It takes the value of 1 for state victories and 0 for state losses in a case where the State is one of the parties.<sup>3</sup> We estimate the effect of historical shrine density on judicial decision-making. A simple OLS estimation of shrine density impact on judicial decisions, however, will be confounded by omitted factors correlated with historical shrine density, such as historical commercial activity. Therefore, to obtain causal estimates for the theoretical predictions, we rely on the timing of the military coup in 1999 as an exogenous shock to the local district high courts in a differences-in-differences framework.<sup>4</sup> We show that districts that had high historical shrine density experienced a large increase in State Wins following the military coup. Specifically, we find that 1 standard deviation increase in shrine density increases State Wins by about 5 percentage points (following the coup).

If, consistent with our theory, religious leaders associated with the shrines were able to influence judicial decision-making when they gained political office, several testable implications arise. First, we should only observe the impact of shrines in those districts where religious leaders rose to power. Consistent with our theoretical prediction, we find that the impact of shrine density on judicial outcomes is only observed in those districts that implemented a local government system that mandated direct elections of mayors (*Nazims*), where religious leaders connected with the shrines gained political office. We verify these results by exploiting the 9/11 attacks in the US as an exogenous shock to

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<sup>3</sup>For reasons that will become clearer in the theory section, we examine how religious leaders impact judicial independence from the executive. Therefore, the State in this context includes the organs of the state yielding executive power such as public agencies, federal and local governments (in line with the conceptualizations of The State as an executive organ in [de Secondat Montesquieu \(1748\)](#)). We ask a law firm to code this variable based on their reading of the texts of judgements. To reduce the inherent subjectivity in construction of some of these variables, we ask the law firm to have two independent teams code the same cases. Table B.1 in Empirical Appendix B.3 presents correlation coefficients of the variables coded between the two teams of coders. We obtain similar results using either dataset.

<sup>4</sup>A vast amount of anecdotal evidence argues that the military coup was precipitated by the sudden dismissal of General Musharraf by the Prime Minister Nawaz Sharif, see for instance, ([Bose and Jalal \(2017\)](#)).

implementation of the local government system in Pakistan, which increases our confidence in the causal interpretation of the coefficients.<sup>5</sup>

Second, the political influence channel implies that only those cases where the political stakes are high should be impacted. Thus, no impact should be observed in cases where the political stakes are low or where there are no available resources for the religious political leaders to capture. We test this prediction by leveraging the information on the type of cases. Specifically, we show that State Wins only increase in politically high-stakes cases involving land disputes with the government, and in human rights cases involving the State (where there are valuable resources available for capture by the State).<sup>6</sup> This suggests that following the military coup, shrine leaders were able to wield their political power to influence the courts, and to exert control over the population by expropriating tangible resources (such as land) and intangible resources (like the right to an education).<sup>7</sup> A placebo test provides a tighter link for this channel, since we observe no impact of high shrine density in relatively low-stakes everyday criminal cases following the coup, where the resources available for capture by the State are relatively less valuable.<sup>8</sup> This is compatible with anecdotal as well as recent quantitative evidence that religious leaders expropriate private property such as land, and reduce the provision of public goods (such as education) for their constituents (Aziz (2001), Malik and Mirza (2019)).

Third, if religious leaders gained political office in the local government, then we should expect judicial decision-making to be biased in cases involving the local government.<sup>9</sup> In fact, we observe the impact of shrine density only in those judicial cases that involve disputes with the local government, while we fail to reject the null effect in cases involving disputes with the provincial or federal government.

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<sup>5</sup>This is because the 9/11 attacks, and consequent War in Afghanistan, instigated a refugee crisis with about 2 million Afghan refugees moving to areas bordering Pakistan and Afghanistan (UNHCR (2019)). This prevented implementation of the local government reform of 2000-2001 in districts on the Afghan-Pakistan border (Cheema, Khwaja and Qadir (2006)). Reassuringly, we only find the effect of shrines in those districts where local government elections were held.

<sup>6</sup>This is also consistent with historical evidence gathered by Coulson (1964), who argues that politicians in Muslim-majority countries consider land as a rival source of power and use the Judiciary to extract land from the population and consolidate their power.

<sup>7</sup>Indeed, Malik and Mirza (2019) show that religious (shrine) leaders in Pakistan when elected, systematically spend less on education in their respective constituencies. This they argue, based on historical accounts, is because education dilutes the power of these religious elites.

<sup>8</sup>State Wins in this case is the conviction rate. A random sample of 100 criminal cases confirms anecdotal evidence that the vast majority of these cases involve petty theft and burglary, with relatively low political stakes.

<sup>9</sup>Or we should at least expect to find a larger increase in State Wins in cases involving the local government.

Finally, in accordance with our theoretical prediction, we also find that an increase in State Wins implies a fall in the quality of judicial decisions. In particular, we show that districts with high historical shrine density also experienced an increase in case delay and a decrease in decisions based on evidence or the “merits” of the case. Specifically, we find that a 1 standard deviation increase in shrine density is linked to a case delay increase of 2.5 months and to a decrease in decisions based on evidence of the case by about 6 percentage points. These two proxies of decision quality taken together suggest that the new political equilibrium deteriorated the quality of judicial decisions.

We demonstrate the robustness of these results by conducting a series of sensitivity checks. First, we show that the results are not driven by differential trends: we find no evidence of differential trends between low and high shrine-density areas prior to the coup. Indeed, this is crucial for the causal interpretation of the results. Second, we rule out possibility of confusing the effect of shrine density with potentially confounding interactions with the coup.<sup>10</sup> In particular, we show that differences in case or judge characteristics are unlikely to be behind the results. Third, we show that the increase in State Wins following the coup is not a correction of low State Wins for high shrine-density districts prior to the coup.<sup>11</sup> Fourth, we present evidence that the results are not driven by a potentially confounding reform in 2004 that may have impacted judicial decision-making. Fifth, we show that the results are insensitive to exclusion of potential outliers as well as to choice of shrine dataset.<sup>12</sup> Finally, we demonstrate that the results are robust to alternative specifications or different clustering of the standard errors.

The paper contributes to several strands of the existing literature. Principally, it speaks to the literature that studies the conditions for establishment of rule of law in societies, and its consequences (e.g. [Posner \(1983\)](#), [North and Weingast \(1989\)](#), [La Porta et al. \(2004\)](#), [Balas et al. \(2009\)](#), [Anderson \(2018\)](#), [Acemoglu and Robinson \(2019\)](#)). For instance, [Glaeser and Shleifer \(2002\)](#) argue that the pressure exerted on the Judiciary by the State in 12<sup>th</sup> and 13<sup>th</sup> century England and France may explain why these countries adopted common law or civil law systems. An extensive literature has argued that the adoption of civil or common law systems had consequences on institutional development

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<sup>10</sup>Even in the absence of pre-trends, we could be confusing the effect of shrine density with confounding interactions with the coup. For instance, religious leaders’ behavior might alter the type of cases filed or different judges might preside over cases following the coup.

<sup>11</sup>That is, we show that State Wins are not decreasing in shrine density prior to the coup.

<sup>12</sup>For instance, we show that the results obtain regardless of the choice of shrine dataset, i.e. from British Colonial Gazettes or from Auqaf Department of the Ministry of Religious Affairs, Pakistan.

and economic growth across the world.<sup>13</sup> We complement and contribute to this literature in two ways. First, we examine how religion – another pillar of prosperity for societies – interacts with judicial decision-making and politics. Second, we provide a structural estimation of the theory, using data from Pakistan. Our work thereby adds to the scant literature on courts in developing countries. Indeed, the case-level micro data from Pakistan allows us to test the key predictions of the theory in a context where data is scarce, democratic institutions have not taken root, and political interference in the judiciary is rampant (Husain (2018)). Our paper therefore improves understanding of the conditions under which judicial independence may be compromised in a society.<sup>14</sup>

Our paper also speaks to the growing literature on the political economy of religion (Kuran (2011), Carvalho (2012), Chaney (2013), Platteau (2017), Rubin (2017), Barro and McCleary (2019)).<sup>15</sup> Our contribution to this literature is threefold. First, to our knowledge, this is the first systematic study of the effect of religion on formal justice. We provide evidence that religion substantially affects judicial decisions by allowing religious elites to gain political power and to extract resources from the community. Our second contribution is to show how religious and secular leaders compete in elections and affect judicial decisions through the heterogeneous legitimacy channel. Third, given that the papers in this literature are typically empirical, we also contribute by building and estimating a political economy theory. Our work is closely related to Rubin (2017), who studies how the legitimacy of religious elites in the Muslim world influenced institutions and economic development.<sup>16</sup> Our analysis provides both theoretical and empirical foundations to the analysis of Rubin (2017). Likewise, our work also speaks to the work of Auriol and Platteau (2017), and Auriol, Platteau and Verdier (2019), who study the co-optation of religious

<sup>13</sup>See La Porta, Lopez-de Silanes and Shleifer (2008) for a review of this literature.

<sup>14</sup>Our paper also complements and contributes to the theoretical work on judicial decision-making. For instance, Gennaioli and Shleifer (2007) study the evolution of judicial decisions under the common law system, and Bordalo, Gennaioli and Shleifer (2015) study the role of the salience of some facts in bending judicial decisions. We abstract from these considerations in our theory, and assume instead that judicial decisions are made based on the *Merits* of the claims made in Court by the litigants. Since the *Merits* of the claims – as evaluated by judges – are stochastic, our theory is particularly amenable to structural estimation.

<sup>15</sup>Other related works include Platteau (2008), Clingingsmith, Khwaja and Kremer (2009), Platteau (2011), Campante and Yanagizawa-Drott (2015), Belloc, Drago and Galbiati (2016), Malik and Mirza (2019), Seror (2018), Bisin, Seror and Verdier (2019), Bazzi, Koehler-Derrick and Marx (2019), Saleh and Tirole (2019), Chaney (2018), Bueno de Mesquita and Bueno de Mesquita (2019), and Auriol, Platteau and Verdier (2019).

<sup>16</sup>Relatedly, Platteau (2017) provides a thorough analysis of the instrumentalization of Islam by political leaders, and studies the role of the decentralized structure of the Islamic religion.

leaders by autocrats. We complement these studies, as we uncover an important channel through which co-optation operates.

The paper proceeds as follows. Section 2 presents the theory, Section 3 discusses the historical context of Pakistan, and Section 4 presents the econometric model, the empirical results, and the robustness checks. Section 5 concludes. The mathematical proofs, as well as more technical material can be found in the online Appendix A, while further details of data construction, its sources, and additional sensitivity tests, are relegated to the online Appendix B.

## 2 Theory

The model has three stages. In the first stage, candidates with different characteristics decide whether to run for local elections. In the second stage, the elected candidates have the opportunity to threaten judges in order to obtain resources. In the last stage, judges rule on the judicial cases. We solve this game recursively, and derive a set of five testable predictions.

### 2.1 The problem of the judges

We assume that there is a set  $\mathcal{J}$  of judges. A judicial case is denoted as  $c$ , which we assume belongs to a finite set of cases  $\mathcal{C}$ . We focus on judicial cases involving two parties, one being the State. In the rest of the paper, we refer to the party opposing the State as the litigant. Under the existing legal rules, claims are made by the State and the litigant in each case  $c$ , and judges form preferences over the relative merit of litigant's and State's respective claims.

We conceptualize judges as agents making decisions based on the *merit* of the claims presented in the Court. For a judicial case  $c$ , ruled in district  $d$ , by judge  $j \in \mathcal{J}$ , we denote  $D_{ns}(c, j, d) > 0$  a measure of the merit of the claims made by the litigant in Court, as evaluated by judge  $j$ . A low value of  $D_{ns}(c, j, d)$  therefore indicates that the claims made by the litigant lack merit in the legal sense, as evaluated by judge  $j$ . The litigant may, for instance, have violated the law, or not set forth sufficient facts for the court to find the claim valid. The claim may also simply be disregarded by judge  $j \in \mathcal{J}$  due to his own



preferences.<sup>17</sup> Likewise, we denote  $D_s(c, j, d)$  the merit of the claim made by the State in case  $c$ , as assessed by judge  $j$  in district  $d$ .

We assume that  $D_{ns}(c, j, d)$  and  $D_s(c, j, d)$  are random variables, and that neither State nor litigant knows the realization of  $D_{ns}(c, j, d)$  and  $D_s(c, j, d)$  before the judges adjudicate.<sup>18</sup> We further assume that  $D_{ns}(c, j, d)$ , the merit of the claims made by the litigant, is uniformly distributed over the segment  $[0, \phi]$ , with  $\phi > 0$  and that  $D_s(c, j, d)$ , the merit of the claims made by the State, is drawn from a judge-district-specific uniform distribution over the segment  $[\sigma(j, d), \sigma(j, d) + \phi]$ . The parameter  $\phi$  measures the heterogeneity in the preferences of judges for ruling both in favor of and against the State. For instance, if  $\phi > 0$  is high, then there is great heterogeneity in assessment of the quality of claims both of State and of litigant. The parameter  $\sigma(j, d)$  measures the bias in the preference of judge  $j \in \mathcal{J}$  for ruling in favor of the State in district  $d \in \mathcal{D}$ . A positive  $\sigma(j, d)$  thus means that in district  $d$ , judge  $j$  tends, on average, to rule in favor of the State. By contrast, if  $\sigma(j, d)$  is negative, then judge  $j$  tends to be biased in favor of the litigant. For simplicity, we assume that the average bias of the judge toward the State is the same across districts, and we denote it by  $\bar{\sigma}$ .

Finally, we assume that the resources at stake in any judicial case  $c$  are fixed at  $k > 0$ . We abstract from the cost of filing a case in this section. This assumption does not directly interfere with our result. We present an extension of the model that accounts for filing costs in Appendix A.7 where we show that our results are robust to positive filing costs. Last, we assume that judges earn a fixed wage  $w > 0$ .

Elected politicians have an incentive to influence judicial decisions, as they can extract resources from the community by increasing the likelihood of State Wins. This is consistent with the vast anecdotal evidence from many developing countries such as Ghana, China, India, Bangladesh and Pakistan, where politicians influence judges to extract resources such as land (Ran (2011); Feldman and Geisler (2012); Jamali (2015)). Indeed, scholars have long recognized the instrumentation of the Judiciary for this resource extraction (Coulson (1964), Platteau (2017)).

In our setup, in district  $d$ , the elected politician punishes the judges with intensity  $p_d > 0$  if they do not rule in favor of the State. Hence, in district  $d$ , for a judicial case  $c$ ,

<sup>17</sup>For evidence of judge-specific biases impacting judicial decisions, see Shayo and Zussman (2011), Lim (2013) and Alesina and La Ferrara (2014).

<sup>18</sup>This condition ensures that, even in the presence of litigation costs - and despite biases in judicial decisions - cases will be filed. We provide a formal analysis of the model with filing costs in Appendix A.7.

the utility of a judge  $j$  can be expressed as:

$$\begin{cases} V_j^d(c) = w - p_d + \alpha D_{ns}(c, j, d) & \text{if he does not rule in favor of the State, and} \\ V_j^d(c) = w + \alpha D_s(c, j, d) & \text{otherwise.} \end{cases} \quad (1)$$

Judges', then, rule against the State in a case  $c$  when:

$$w + \alpha D_{ns}(c, j, d) - p_d \geq w + \alpha D_s(c, j, d), \quad (2)$$

and rule in its favor otherwise. The parameter  $\alpha > 0$  denotes the extent to which judges stick to their preferences in their judicial decisions. Therefore, as represented in Figure I, the State is ruled against by judge  $j \in \mathcal{J}$  in all the cases  $c \in \mathcal{C}$  such that:

$$\alpha D_{ns}(c, j, d) - p_d \geq \alpha D_s(c, j, d). \quad (3)$$

In the absence of pressure from elected politicians, all cases below the 45° line would be ruled against the State. Therefore, the shaded area in Figure I represents the likelihood of a case being *wrongly* ruled in favor of the State, due to political pressure. Indeed, in the absence of political pressure, for any case in the shaded area, given the preference parameters  $D_{ns}(c, j)$  and  $D_s(c, j)$ , the State should not have won.

We can express the probability of judge  $j$  ruling in favor of the State in case  $c$  and district  $d$  as:

$$SW(p_d, c, j, d) = \Pr(D_s(c, j) \geq D_{ns}(c, j) - \frac{p_d}{\alpha}). \quad (4)$$

Given that  $D_s(c, j, d)$  and  $D_{ns}(c, j, d)$  follow uniform distributions, we demonstrate in Appendix A.1 that (4) can be rewritten as:

$$SW(p_d, c, j, d) = \frac{1}{2} + \frac{\sigma(j, d)}{\phi} + \frac{p_d}{\phi\alpha}. \quad (5)$$

We deduce the following result:

**Lemma 1**

- The fraction of judicial cases won by the State in district  $d \in \mathcal{D}$  can be expressed as:

$$SW(p_d) = \frac{1}{2} + \frac{\bar{\sigma}}{\phi} + \frac{p_d}{\phi\alpha}, \quad (6)$$

where  $p_d$  is the pressure exerted on the judges by the elected politician in district  $d$ .

- In any district  $d \in \mathcal{D}$ , the fraction of judicial cases won by the State increases with the average bias of judges toward the state ( $\bar{\sigma}$ ) and with the pressure exerted on the judges ( $p_d$ ); it decreases with the heterogeneity in judicial cases ( $\phi$ ) and with judges' propensity to stick to their preferences ( $\alpha$ ).

*Proof.* The proof is available in Appendix A.1. ■

We deduced (6) from (4). Furthermore, by the law of large numbers, the likelihood of the State winning a case in district  $d$  when judge  $j$  rules also denotes the share of cases that are ruled by judge  $j$  in favor of the State. Hence, summing (4) over cases and judges, we obtain (6). This expression, therefore, provides a direct measure for the extent of State capture through pressure on the Judiciary.

Before discussing the comparative statics, observe that the uniform assumption for the distribution of parameters  $D_s(c, j)$  and  $D_{ns}(c, j)$  implies that  $SW(p_d)$  depends linearly on  $p_d$ . This property turns out to be particularly useful for the structural estimation performed in Section 4. The uniform assumption, however, does not drive the comparative static results. We demonstrate in Appendix A.1 that these results still hold with general functional forms.

**Comparative Statics.** The comparative statics analysis shows that the likelihood of the State winning a case increases with the pressure that elected politicians exert on judges. Alternatively, State Wins decrease with  $\phi$ , as greater heterogeneity in judicial cases requires greater political pressure to overturn judicial decisions. Similarly, the likelihood of the State winning a case decreases with  $\alpha$ , the tendency of judges to stick to their preferences in their judicial decisions.

## 2.2 The problem of the voters

The country is divided into a set  $\mathcal{D} = \{1, \dots, D\}$  of districts, where district-level elections are held. In each district, there is a set  $\mathcal{N}_d$  of candidates running for election, with  $\mathcal{N}_d = \{1, \dots, N_d\}$ . For simplicity, we consider the districts to be of equal size, although this assumption does not affect the results. In each district, there is a continuum  $[0, 1]$  of voters. Voter  $v$  derives the utility  $u(v, i)$  from electing candidate  $i \in \mathcal{N}_d$ , with:

$$u(v, i) = \ln(\eta\theta^i + q^i - \mu p^i) + \epsilon^i + \epsilon^{v,i}. \quad (7)$$

We focus on the case of a log specification, which allows us to derive simple expressions for vote shares, as demonstrated below. Instead of (7), we could alternatively consider more general specifications without altering the results.<sup>19</sup>

First, the voters favor candidates they perceive as more legitimate to govern. The parameter  $\theta^i > 0$  denotes the *legitimacy* of candidate  $i$ , as evaluated by the voters. Legitimacy is often rooted in internalized values and world views provided by religions, organizations or charismatic individuals. In that respect, it has been argued that Islam – through its doctrine and legal rules – has been particularly conducive to legitimizing rulers.<sup>20</sup> Second, voters favor candidates with higher quality  $q^i > 0$ . The parameter  $\eta > 0$  denotes the importance of the legitimacy relative to the quality of the candidates. Third, when a politician exerts pressure on the Judiciary, he erodes both his perceived quality  $q^i$ , and his legitimacy  $\theta^i$ . We assume in (7) that the overall marginal effect of pressure on both the perceived quality, and the legitimacy, is positive, and equal to  $\mu > 0$ . Finally, voting behavior is stochastic. We distinguish aggregate randomness from idiosyncratic randomness in voting decisions.<sup>21</sup> The parameter  $\epsilon^i$  is independent of any single voter  $v \in [0, 1]$ , and denotes the popularity of candidate  $i$ . Conversely, parameter  $\epsilon^{v,i}$  is voter-specific and models idiosyncrasies in voting decisions.

We assume that both  $\epsilon^i$  and  $\epsilon^{v,i}$  are distributed according to a Gumbel distribution  $G(\cdot)$ , with:

$$G(\epsilon) = e^{-e^{-\epsilon}}, \quad (8)$$

for  $\epsilon$  in the real line. Candidate  $i$  is then chosen by voter  $v$  when:

$$u(i, v) > u(j, v), \text{ for any } j \neq i, j \in \mathcal{N}_d. \quad (9)$$

We are now able to deduce the vote shares of the candidates, and their probability of winning the election. We denote  $\pi(p^i, p^{-i})$  the probability of politician  $i$  winning the election, with  $p^i$  the pressure he exerts on the Judiciary, and  $p^{-i}$  the vector that includes

<sup>19</sup>Indeed, alternative specifications such as  $u(v, i) = \ln(v(\eta\theta^i + q^i - p^i)) + \epsilon^i + \epsilon^{v,i}$ , with  $v(\cdot)$  an increasing and concave function, yield similar results. The log function, however, is necessary, allowing us to mathematically substitute the additive form of the utility (7) into a multiplicative form given that the randomness parameters are also log functions. We rely on multiplicative utilities to derive vote shares, as demonstrated in Appendix A.2.

<sup>20</sup>See, for instance, Rubin (2017) and Platteau (2017) for a detailed discussion of this point.

<sup>21</sup>The distinction between aggregate and idiosyncratic randomness in voting models was introduced by Persson and Tabellini (2002). It enables smooth functions to be computed for candidates' probability of winning, although convexity is not always guaranteed.

the levels of pressure of  $i$ 's opponents in the election. Detailed computations are provided in Appendix A.2, where we also establish the following results:

**Lemma 2**

- The probability  $\pi(p^i, p^{-i})$  of candidate  $i$  winning the election in district  $d \in \mathcal{D}$  is equal to:

$$\pi(p^i, p^{-i}) = \frac{\eta\theta^i + q^i - \mu p^i}{\sum_{j \in \mathcal{N}_d} \eta\theta^j + q^j - \mu p^j}. \quad (10)$$

- $\pi(p^i, p^{-i})$  increases with  $\theta^i$ ,  $q^i$ , and decreases with  $N_d$ ,  $q^j$ , and  $\theta^j$  for  $j \neq i$ .

*Proof.* The proof is available in Appendix A.2. ■

Applying the voting theory developed by Seror and Verdier (2020) for multi-candidate elections, we show that the probability of a candidate winning the election can be expressed as a contest function, as provided in (10), in the vein of Tullock (1980).

**Comparative Statics.** The comparative statics analysis shows that when the legitimacy of the politician  $\theta^i$  increases, voters are more inclined to vote for him, increasing the likelihood of  $i$  winning the election,  $\pi(p^i, p^{-i})$ . Similarly, when candidate  $i$  runs on a high quality platform, he has a higher likelihood of winning the election since  $\pi(p^i, p^{-i})$  increases with  $q^i$ . By contrast, when the competition is fiercer, i.e.  $N_d$  increases, then the likelihood of  $i$  winning the election is lower. Likewise, if  $i$  is running against candidates with a higher legitimacy, then his probability of winning is reduced.

### 2.3 The problem of the politicians

In each district  $d \in \mathcal{D}$ , there is a set  $\mathcal{N}_d$  of candidates running for elections, with  $\mathcal{D} = \{1, \dots, D\}$ , and  $\mathcal{N}_d = \{1, \dots, N_d\}$ . We assume that politicians belong to two types: they have either high or low legitimacy,  $\theta^i \in \{\theta^l, \theta^h\}$ , with  $\theta^l < \theta^h$ .

Districts differ in the fraction of politicians with high legitimacy. That is, districts vary in the number of religious leaders, who, by assumption, have significant legitimacy  $\theta^h$ . Secular politicians, by contrast, are assumed to have lower legitimacy  $\theta^l$ . Further, in our empirical application to Pakistan, each religious leader can at most represent one particular shrine. Indeed, the value and scarcity of the shrines can be ascertained from the court battles raging over the rightful lineage of the shrine (Warraich (2017), Malik (2019)). Therefore, the number of religious leaders available is constrained by historical

shrine density. We thus denote  $M_d$  the number of shrines in district  $d$ , and assume that the number of high-legitimacy politicians running for election in district  $d$  can, at most, be equal to  $M_d$ .

Let  $N_d^h$  be the number of politicians running for election in district  $d$  and that possess a high legitimacy. From the above discussion, then, the number of candidates with high legitimacy is constrained by the number of shrines in the district, so  $N_d^h \leq M_d$ . Similarly, we denote  $N_d^l$  the number of low-legitimacy politicians running in district  $d$ . We assume that there is no constraint on  $N_d^l$ .

Candidate  $i$ 's utility is given by:

$$W(p^i, p^{-i}) = -\gamma\phi(p^i) + \pi(p^i, p^{-i})\{k(SW(p^i) - SW(0)) + \chi\}, \quad (11)$$

where  $SW(p^i)$  is given in (6), and  $\pi(p^i, p^{-i})$  in (10). Upon being elected, politicians have two concerns. First, elected politicians care about the resources they can extract from the litigants by influencing judicial decisions. Indeed, when a case is *wrongly* decided in favor of the State, due to political pressure, elected politicians extract the resources at stake in the litigation. The fraction of cases that are decided in favor of the State, but that should have been won by the community, is  $SW(p) - SW(0)$ . Second, elected politicians value being in office. The parameter  $\chi > 0$  denotes the utility that politicians derive from being in office.

Third, delivering a punishment of  $p$  to judges costs the politicians  $\gamma\phi(p)$ . The parameter  $\gamma > 0$  captures the institutional and technological factors that affect the costs of delivering threats. For example, when President General Musharraf in Pakistan used threats to oblige the Chief Justice of Pakistan to rule in his favor in March 2007, his popularity plummeted (Faqir, Islam and Rizvi (2013)). We finally assume that  $\phi(\cdot)$  is twice continuously differentiable, with  $\phi(0) > 0$ ,  $\phi' > 0$ , and  $\phi'' > 0$ .<sup>22</sup>

The first-order condition (FOC) associated with the maximization of (11) with respect to the punishment  $p$  is:

$$-\left[\gamma\phi'(p) - \frac{\partial\pi(p^i, p^{-i})}{\partial p^i}\{k(SW(p) - SW(0)) + \chi\}\right] + \pi(p^i, p^{-i})kSW'(p) \leq 0, \quad (12)$$

which holds with equality if the solution is interior. From the above equation, politicians increase the pressure on judges as long as the expected marginal return is greater than

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<sup>22</sup>As  $\phi(0) > 0$ , politicians necessarily face a sunk cost from competing in local elections.

its marginal cost. The expected marginal return is equal to the increase in resources that are captured by the politicians through bending judicial decisions toward the State. The marginal cost consists of two terms. First, the politician bears the direct cost of delivering punishments. Second, exerting influence on judges negatively impacts the politician's perceived quality, and hence the likelihood of his being chosen by the community.

We denote  $p^{i*}$  the punishment that maximizes the expected utility of politician  $i$ . If  $W(p^{i*}, p^{-i*})$  is non-negative, politician  $i$  runs for the election in his district. Otherwise, he prefers to stay inactive. We can deduce  $N_d^h$  and  $N_d^l$ , the number of candidates with high and low legitimacy respectively, running for the election in district  $d$ . Indeed,  $N_d^h$  and  $N_d^l$  solve the following system:

$$\begin{cases} W(p^{i*}, p^{-i*}) = 0 \text{ for } i \in \{1, \dots, N_d^h\}, \text{ and} \\ W(p^{i*}, p^{-i*}) = 0 \text{ for } i \in \{1, \dots, N_d^l\} \end{cases} \quad (13)$$

when  $N_d^h < M_d$ , and

$$\begin{cases} W(p^{i*}, p^{-i*}) > 0 \text{ for } i \in \{1, \dots, N_d^h\}, \text{ and} \\ W(p^{i*}, p^{-i*}) = 0 \text{ for } i \in \{1, \dots, N_d^l\} \end{cases} \quad (14)$$

when  $N_d^h = M_d$

The number of candidates with a high legitimacy  $N_d^h$  is thus constrained by  $M_d$ . Different districts, then, have differing proportions of politicians with high legitimacy, based, for instance, on historical shrine density. Or said differently, the constraint  $N_d^h \leq M_d$  weights differently across districts on electoral outcomes.

## 2.4 Nash Equilibrium

In the Nash Equilibrium, first, in any district  $d \in \mathcal{D}$ , and for any judicial case  $c \in \mathcal{C}$ , judges rule for, or against the State, so as to maximize their utility.<sup>23</sup> Second, in district-level elections, each voter chooses the candidate that provides him the highest utility.<sup>24</sup> Third, politicians choose (i) whether or not to run for local elections, and (ii) the level of pressure  $p$  that they will exert on judges once elected. Any politician runs for the district-level election if his utility from doing so is non-negative; once elected, he will exert a level of

<sup>23</sup>The optimization problem of judges is studied in Section 2.1.

<sup>24</sup>The optimization problem of voters is studied in Section 2.2.

pressure  $p$  that maximizes his utility. Hence, as in citizen-candidate models, there is no commitment problem.<sup>25</sup> We deduce the following result:

**Proposition 1** *In any district  $d \in \mathcal{D}$ , there exists a unique Nash equilibrium such that:*

- *Politicians with higher legitimacy have greater incentive to run for elections and exert greater pressure on the Judiciary relative to their peers with lower legitimacy.*

*Proof.* The proof is available in Appendix A.3. ■

The uniqueness of the equilibrium follows from two intermediate results. On the one hand, the second-order condition associated with the maximization problem of the candidates is verified. This implies that the optimal level of pressure that any politician exerts is uniquely determined. On the other hand, candidates' utility decreases with the number of politicians running for election. Hence, greater competition implies a decrease in candidates' willingness to enter the electoral race. The numbers of politicians with low and high legitimacy running for election is then uniquely determined. The equilibrium is typically such that candidates are indifferent between entering, and staying inactive.<sup>26</sup>

The first part of the proposition states that high-legitimacy candidates have a greater incentive to run for elections. Indeed, higher-legitimacy candidates derive greater utility levels, because they have a greater probability of being chosen by the voters. The second part of the proposition states that high-legitimacy candidates exert greater pressure on the Judiciary than low-legitimacy ones do. This result is explained by the fact that high-legitimacy candidates obtain a higher marginal benefit from exerting pressure on judges, and at a lower marginal cost. This follows from the observation that exerting pressure on judges has relatively less negative impact on high-legitimacy candidates' than on low-legitimacy candidates' likelihood of winning.

## Religious Shrines and Judicial Decisions

In the rest of the paper, we denote  $N_d^{i*}$  the number of candidates of type  $i \in \{l, h\}$  running in district  $d \in \mathcal{D}$ . Similarly, we denote  $p_d^{i*}$  the optimal punishment meted out by a candidate of type  $i \in \{l, h\}$ .

<sup>25</sup>The optimization problem of politicians is studied in Section 2.3. For citizen-candidate models, see, for instance, Osborne and Slivinski (1996) and Besley and Coate (1997).

<sup>26</sup>There can, however, be as many candidates with high legitimacy as the number of shrines  $M^d$ . Candidates with a high legitimacy may, then, have a strictly positive incentive to run for elections in districts where the number of shrines is low.



Any candidate with a given level of legitimacy in district  $d \in \mathcal{D}$ , faces the same first-order condition. Hence, in the Nash equilibrium, the candidates of type  $i \in \{l, h\}$  exert the same level of threat to the judiciary,  $p_d^{i*}$ . The expected level of threat to judges in district  $d \in \mathcal{D}$ , which we denote  $\mathbb{E} p_d^*$ , can then be expressed as:

$$\mathbb{E} p_d^* = N_d^{h*} \pi(p_d^{h*}, p_d^{-h*}) p_d^{h*} + N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) p_d^{l*}, \quad (15)$$

with  $N_d^{h*}$  and  $N_d^{l*}$  denoting the number of candidates with a high and a low legitimacy, respectively.

In districts such that  $N_d^{h*} < M_d$ , having more shrines does not affect electoral outcomes, and judicial decisions. Indeed, in such districts, shrine elites are indifferent between running for the district-level election and staying inactive. Hence, more shrines will neither alter the number of candidates nor impact the pressure that the elected politicians exert on judges. By contrast, in districts where  $N_d^{h*} = M_d$ , having more shrines directly impacts electoral competition. More candidates with high legitimacy run for election when there are more shrines. Hence, higher shrine density changes the expected bias of judicial decisions, and decision quality in this scenario. We are then able to deduce the following result:

**Prediction 1** *When  $\gamma$  is sufficiently low, judicial decisions tend to be more biased in favor of the State in districts where there are more shrines.*

*Proof.* The proof is available in Appendix A.4. ■

To grasp the intuition of Prediction 1, recall that from (6), the fraction of judicial cases won by the State can be expressed as:

$$SW(\mathbb{E} p_d^*) = \frac{1}{2} + \frac{\bar{\sigma}}{\phi} + \frac{\mathbb{E} p_d^*}{\phi \alpha}. \quad (16)$$

Hence, in any district  $d \in \mathcal{D}$ , the fraction of judicial cases won by the State is linearly increasing with the expected level of threat exerted on the Judiciary in that district. Furthermore, the effect of a higher shrine density in district  $d$ ,  $M_d$ , on the level of threat made to judges can be expressed as follows:

$$\begin{aligned} \frac{\partial \mathbb{E} p_d^*}{\partial M_d} &= \frac{\partial [N_d^{h*} \pi(p_d^{h*}, p_d^{-h*})]}{\partial M_d} (p_d^{h*} - p_d^{l*}) \\ &\quad + \{N_d^{h*} \pi(p_d^{h*}, p_d^{-h*}) \frac{\partial p_d^{h*}}{\partial M_d} + N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) \frac{\partial p_d^{l*}}{\partial M_d}\}. \end{aligned} \quad (17)$$

In districts where there are more shrines, there are more politicians with high legitimacy competing for election. Hence, in such districts, the likelihood of a politician with high legitimacy winning the election is higher.<sup>27</sup> Additionally, once elected, politicians with high legitimacy exert more pressure on the Judiciary than their peers,  $p_d^{h*} - p_d^{l*} > 0$ . Therefore, in districts where there are more shrines, high-legitimacy candidates have a higher likelihood of winning and they exert more pressure on judges. In (17), then, the first line of the RHS is necessarily positive.

Shrine density, however, has an additional effect on the Nash equilibrium. More shrines – by definition – increase the number of high-legitimacy candidates running for election. Hence, higher shrine density makes electoral competition fiercer. In turn, fiercer competition disciplines candidates, who decrease the levels of threat they exert on the Judiciary. Therefore, the second line of the RHS is necessarily negative in (17).

As a result of the two preceding effects, more shrines may not always make judicial decisions more biased toward the State. We demonstrate in the Appendix that overall, a greater number of shrines does increase the level of pressure on judges when  $\gamma$  is sufficiently low. A formal condition on  $\gamma$  is provided in Appendix A.4. The previous condition on  $\gamma$  is sufficient, because when  $\gamma$  vanishes, then more candidates compete and platforms become less elastic to competition.

## 2.5 Extensions

In this section, we extend our framework in four relevant directions. First, we extend the framework so as to account for heterogeneous types of judicial cases, e.g. cases pertaining to human rights, criminal cases, or land disputes with the State. Second, we consider how heterogeneous voters affect our main predictions: voters may differ in their beliefs regarding politicians' relative legitimacy to govern. Third, we study how shrines affect the quality of judicial decisions. Finally, we introduce the military into the model, and study the rationale behind political decentralization reforms.

### 2.5.1 Shrines Only Affect Politically Salient Cases

Suppose that cases differ in the resources that can be extracted by the State when it wins in Court. In land disputes, for instance, elected politicians may be able to extract resources

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<sup>27</sup>We demonstrate in Appendix A.4 that  $\frac{\partial [N^{h*} \pi(p_d^{h*}, p_d^{-h*})]}{\partial M_d} > 0$ .

when judges are forced to rule in favor of the State.<sup>28</sup> Similarly, politicians may also stand to gain from the State winning cases when intangible resources are at stake such as political rights. In such cases, elected politicians may directly benefit from influencing judicial decisions. They may wish, for instance, to thwart opposition movements and consolidate their grip on power. In one such case, the political right to citizenship was expropriated by the government when the citizenship of an opposition leader was “cancelled” just days before he was to lead a protest against the government (Naseer (2019)). In contrast, politicians may have little incentive to affect judicial decisions in cases where resources of value to them are not at stake. For instance, everyday criminal cases involving theft or burglary may be considered less politically salient than land and political rights cases.

Formally, we assume that each case  $c$  is of type  $t$ , with  $t \in \{1, 2\}$ . If a case is of type 1, then the resources at stake are equal to  $k > 0$ . The parameter  $k$  denotes both the tangible, and the intangible resources at stake in a judicial case. By contrast, if a case is of type 2, then no resources can be extracted by the State. Examples of type 1 cases – where tangible and intangible resources at stake – are land disputes, and human rights disputes with the State, respectively.<sup>29</sup> Examples of type 2 cases include criminal cases that are not politically salient.<sup>30</sup> We deduce the following result:

**Prediction 2** *Shrines only affect judicial decision-making in the type of judicial cases where the value of resources that can be captured by the State is positive.*

This prediction is straightforward. It implies that elected politicians influence the judicial decisions only in the type of cases where resources can be extracted from the community.

### 2.5.2 Shrines Only Affect Cases Involving Local Governments

Shrine leaders derive their legitimacy from the shrine they are connected to. Hence, shrine leaders are considered as natural rulers, but only by the voters living close to their particular

<sup>28</sup>This is true for many developing countries where politicians consolidate their power through expropriating land from the population (Coulson (1964), Platteau (2017)).

<sup>29</sup>Another example of a human rights case is when a journalist complaining to the Court that his freedom of movement was expropriated by the government shortly following his criticism of government policies (see, Jazeera (2016)).

<sup>30</sup>Some criminal cases, for instance, against political opponents may be politically salient. However, given the relative scarcity of these cases, we ignore this issue in the paper. Indeed, an analysis of a random sample of 100 criminal cases in Pakistani courts reveals that only 2% of the criminal cases could be classified as politically salient.

shrine.<sup>31</sup> As an approximation, then, we could assume that a shrine leader  $i$  in district  $d \in \mathcal{D}$  derives legitimacy  $\theta_i$  such that:

$$\theta_i = \begin{cases} \theta^h & \text{if } i \text{ is candidate in district } d, \text{ and} \\ \theta^l & \text{otherwise.} \end{cases} \quad (18)$$

In words, a shrine leader in district  $d \in \mathcal{D}$  is considered a natural ruler only in district  $d$ .

**Prediction 3** *Shrines only affect judicial decisions at the local government level.*

Shrine leaders are considered as legitimate candidates for political office at the local level, from (18). Hence, they only run in the district where their shrine is located, since their incentive to run there is strictly larger. Therefore, the number of shrines affects political competition at the district level. In any district  $d$ , then, we should not expect the shrine density in other districts than  $d$  to affect judicial decisions. The shrine elite can thus be expected to impact judicial decisions at the local level but not at the provincial or federal levels. Finally, and consistent with Prediction 2, since shrine leaders only gain local political office, then they may not have an interest in affecting judicial cases at the provincial or federal levels, where they cannot extract resources.

### 2.5.3 Shrines Negatively Affect Judicial Quality

Each judicial decision has an associated quality. Although there is no consensus on an ‘objective’ measure of case quality, various measures have been proposed in the literature.<sup>32</sup> A commonly used measure of judicial quality is case delay, or the time it takes to reach the judicial decision (e.g. in Djankov et al. (2003)). Any measure of judicial quality should be positively associated with the utility that judges derive from doing their job. Indeed, higher utility levels deter judges from shirking, and attract more able individuals. Hence, the utility of judges directly reflects judicial quality.

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<sup>31</sup>This is widely supported by historical evidence from South Asia where the influence of the shrine elite is particularly marked in areas around the shrine, given the personal master-disciple relationship between the shrine elite and the shrine followers (Suvorova (2004)).

<sup>32</sup>See, for instance, Ash and MacLeod (2019). For a review of the various existing measures of judicial decision quality, see, for example Voigt, Gutmann and Feld (2015).

We deduce from (1) that a judge's expected utility from ruling, in equilibrium, can be expressed as follows:

$$\mathbb{E} V_j^d(c) = w + \int_{D_{ns}(c)=0}^{\phi} \int_{D_{ns}(c)-\mathbb{E} p_d^*/\alpha \geq D_s(c)}^{\phi} \{\alpha D_{ns}(c) - \mathbb{E} p_d^*\} \frac{dD_{ns}(c)}{\phi} \frac{dD_s(c)}{\phi} + \int_{D_{ns}(c)=0}^{\phi} \int_{D_{ns}(c)-\mathbb{E} p_d^*/\alpha \leq D_s(c)}^{\phi} \alpha D_s(c) \frac{dD_{ns}(c)}{\phi} \frac{dD_s(c)}{\phi}. \quad (19)$$

The threats that politicians exert thus have two effects on the welfare of judges. First, stronger threats have a negative – and direct – effect on judges' welfare. Second, because judges desire to rule fairly relative to the merits of the judicial cases, they suffer from being forced to rule in ways that do not systematically reflect their fair assessment of judicial cases.<sup>33</sup> We prove the following result in Appendix A.5:

**Prediction 4** *The quality of judicial decisions is lower in districts where there are more shrines.*

*Proof.* The proof is available in Appendix A.5. ■

The level of threat exerted on judges in high shrine-density districts is higher. Hence, the utility of judges is lower in districts where there are more shrines too. In such districts, judges have less incentive to exert effort, and less able individuals are expected to become judges.

Interestingly, the preceding result holds *despite* the fact that the model accounts for judge-specific biases in judicial decisions. In particular, the preceding result holds even when judges – through their preferences – are biased in favor of the State in their decisions. Indeed, such judges – given the existence of political threats – may find themselves forced to act under threat, when they would have preferred to rule against the State. The mere existence of political threats – for a positive measure of judicial cases – suffices to make any judge worse off, regardless of his own preferences.<sup>34</sup>

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<sup>33</sup>In an extended version of this model, we could consider collusion between politicians, and judges. With collusion, some judges may actually benefit from the existence of political threats.

<sup>34</sup>Alternatively, Prediction 4 may not hold in a case where judges choose their occupation *only* to collude with politicians, and to extract rents. However, given that becoming a judge necessitates substantial, and long-term investments in human capital, we can reasonably assume that such corrupt individuals are not representative of the average judge. Analysis of judgements in Pakistan and India supports this assumption, given the level of procedure and detail faced by a typical judge before issuing a decision.

#### 2.5.4 Military Coups, Decentralization, and Judicial Independence

To address the issue of the emergence of a religious elite in the political arena following the military coups, we extend our framework to study the strategic decision-making of the military. We demonstrate that decentralization reforms may be strategic for military leaders, allowing them to consolidate their power. As a simple, yet key illustration from the case of Pakistan, *every* military coup since the independence from British colonial rule was followed by decentralization reforms enacted by the military regime ([Cheema, Khwaja and Qadir \(2006\)](#)). More broadly, the paradox of autocratic regimes holding local elections seems to hold across the Muslim world: Indonesia under Suharto, Saudi Arabia under Abdullah, and Yemen under Saleh are just a few examples.<sup>35</sup>

**The problem of the military:** Following a coup, the military seeks to maximize the resources it can extract from the community, and to consolidate its power. To this end, the military may alter the State institutions. In particular, it may decide either to keep a centralized state, or to decentralize the political structure.

When the State stays centralized, the military can extract resources either by influencing judicial decisions or by engaging in other corrupt practices.<sup>36</sup> The total amount of resources  $R^{ce}$  that the military extracts can be written as:

$$R^{ce} = r^{ce} + k\{SW(p^{ce}) - SW(0)\}, \quad (20)$$

where  $r^{ce} > 0$  are the resources extracted independent of the Judiciary. Such resources can, for instance, be obtained through corruption by military officials. Furthermore, the parameter  $p^{ce}$  denotes the level of pressure that the military exerts on judicial decisions in a centralized state. We assume that higher extraction levels increase the probability of the military being ousted. Formally, let  $q(R^{ce})$  be the probability of the military being ousted when it extracts an amount  $R^{ce}$  of resources from the community. We assume  $q(\cdot)$  twice continuously differentiable, with  $q(0) = \bar{q} < 1$ ,  $q' > 0$ , and  $q'' < 0$ . In the event of a successful revolution, we assume that the military gets a fixed utility, normalized to zero.

<sup>35</sup>See, for instance, [Martinez-Bravo et al. \(2017\)](#) for a related discussion.

<sup>36</sup>There is substantial anecdotal and survey evidence of this for the case of Pakistan where the military expropriates land and engages in illegal business activities (see for instance, [Siddiqi \(2017\)](#)).

Hence, in a centralized state, the military's utility is given by:

$$U_m^{ce} = q(r^{ce} + k\{SW(p^{ce}) - SW(0)\})[r^{ce} + k\{SW(p^{ce}) - SW(0)\}], \quad (21)$$

which is maximized, as the military chooses a level of punishment to judges  $p^{ce}$ , and the rents  $r^{ce}$  it extracts, independently of the judiciary.

When the State is decentralized, the military does not occupy local political posts. New political elites emerge from the electoral process at the district level. These new elites can bully judges, given their own strategic decisions, as studied in the preceding section. In such a case, then, the total amount of resources  $R^d$  that the military extracts can be written as:

$$R^{de} = r^{de} + k\lambda \sum_{d \in \mathcal{D}} \frac{1}{D} \{SW(\mathbb{E} p_d^*) - SW(0)\}, \quad (22)$$

with  $D > 0$  the number of districts, and  $r^{de}$  the resources extracted independently of the Judiciary (the districts are of equal size  $1/D$ ). The parameter  $\lambda \in [0, 1]$  reflects the existence of redistribution to the military of the resources captured by the local political elite. Finally,  $\sum_{d \in \mathcal{D}} \frac{1}{D} \{SW(\mathbb{E} p_d^*) - SW(0)\}$  gives the expected number of cases that are wrongly ruled in favor of the local governments.

The military's utility, in a decentralized state, is then given by:

$$U_m^{de} = q(r^{de})[r^{de} + k\alpha \sum_{d \in \mathcal{D}} \frac{1}{D} \{SW(\mathbb{E} p_d^*) - SW(0)\}], \quad (23)$$

which it maximizes, by only choosing the resources  $r^{de}$  it extracts, independent of the Judiciary. Indeed, political pressure on the Judiciary is set at local level, by elected politicians, not by the military. Hence, higher levels of pressure on judges do not affect the probability of the military being ousted.

**Results.** The strategic decision-making of the military is the following. First, it decides whether to maintain a centralized State or to decentralize. Given this initial decision, if the State stays centralized, the military maximizes its utility (21) by choosing a level of pressure on judges  $p^{ce*}$  and a level of extraction  $r^{c*}$ . If the State is decentralized, the military maximizes its utility (23) by simply choosing the resources  $r^{de*}$  extracted from the community. We deduce the following result:

**Prediction 5** *If the shrine leaders are sufficiently legitimate in their districts (i.e.  $\theta^h$  is sufficiently high), and given that  $\lambda > 0$ :*

- *Following a coup, the military decentralizes the State.*
- *Military coups, through decentralization reforms, lead to lower judicial independence at the district level, as  $\sum_{d \in \mathcal{D}} \frac{1}{D} SW(\mathbb{E} p_d^*) > SW(p^{ce,*})$ .*

*Proof.* The proof is available in Appendix [A.6](#). ■

The direct benefit of decentralization for the military is to consolidate its power. Decentralization reforms are particularly beneficial when shrine elites are legitimate, because legitimate local politicians exert more pressure on the judiciary. Hence, such politicians allow the military to capture more resources, without necessarily facing a commensurate threat of being ousted. By decentralizing, then, the military free-rides on shrine elites' legitimacy, as the latter are better able to extract resources from the citizenry. This explains why, when shrine leaders' legitimacy is sufficiently high, decentralization reforms are necessarily adopted following a coup. These predictions are consistent with the history of Pakistan, where every single military coup since the independence has involved the military regime decentralizing.

## 3 Empirical Application

### 3.1 Background

In the rest of the paper, we focus on the case of Pakistan with the aim of testing the key predictions of the theory. More specifically, we estimate equation (5), which characterizes the probability of a judge ruling in favor of the State. We begin by discussing the historical context of the courts and religious leaders in Pakistan, followed by a description of decentralization reform and the data used in the analysis.<sup>37</sup>

#### 3.1.1 Shrines and Courts

Pakistan gained its independence from British Colonial rule in August 1947, when British India separated into present-day Pakistan and India. Pakistan houses about 3% of the world's population and is the 5<sup>th</sup> most populous country ([UN \(2019\)](#)). Pakistan is home to the largest number of ancient Sufi shrines ([Aziz \(2001\)](#)).<sup>38</sup> Most historical sources suggest

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<sup>37</sup>More detailed discussion on the structure and history of courts in Pakistan can be found in Appendix [B.2](#).

<sup>38</sup>Other prominent places with Sufi shrines include Bangladesh, Turkey and India.



these holy Muslim shrines were constructed around the 12<sup>th</sup> and 13<sup>th</sup> centuries as tombs of Sufi saints, which have continued to be places of worship and great reverence (Suvorova (2004)). Mughal emperors during the 16<sup>th</sup> century donated large sums of money and land to religious leaders associated with these shrines, in what historians see as an attempt to garner support from the local population (see e.g. Faruqui (2012)).

The religious leaders associated with the shrines are key to understanding the importance and influence of the shrine. The focal person of each shrine is the *sajjada nashin* (literally, the wearer of the holy turban), who is believed to be the direct descendant of the Prophet Muhammad of Islam. He acts as a trustee for all donations to the shrine, and is responsible for holding traditional Sufi rituals at the shrine (Gilmartin (1988)). The power of the *sajjada nashin*, or shrine trustees, derives from their followers. It is believed that the sacred genealogy of shrine trustees bestows on these religious leaders' supernatural powers. Therefore, they enjoy great legitimacy among the local population, who seek shrine custodians' attention for divine intercession to solve their problems. The relationship between the shrine leader and the followers is formalized in a "master-disciple" relationship of peer-mureed, where the shrine leader demands unquestioned loyalty due to his sacred blood. The allegiance of the shrine followers (*mureeds*) provides the shrine leaders a constituency of followers, or a potentially "captive vote bank" ((Malik and Mirza, 2019, p. 13)).

The custodians of shrines are different from the landed elite, since they not only possess material wealth in the form of land, but also "spiritual capital" (Iyer, 2016, p. 396). Therefore, historians argue that shrine custodians can combine the traditional instruments of landed elites, such as coercion, with voluntary compliance (Aziz (2001)). The persisting religious power of these shrine leaders is maintained through a permanent family seat (gaddi or *sajjada*).<sup>39</sup> *Sajjada nashin* have historically played a prominent role in politics, both during British rule and in present day Pakistan (Gilmartin (1988); Aziz (2001)). For instance, Pakistan's current Foreign Minister Shah Mahmood Qureshi and former Prime Minister Yousaf Raza Gilani are descendants of shrine families, and hence trustees of prominent shrines.

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<sup>39</sup>Several historians argue that shrines provide a safeguard against dilution of landed power through inheritance, since the transfer of the gaddi (religious seat) is through a sacred genealogy, where the seat is passed to the eldest son without the traditional fragmentation of property due to inheritance (see e.g. Malik and Mirza (2019)).

### 3.1.2 From Shrine Elite to Politician

During every single military regime in Pakistan, decentralization was adopted. For example, General Musharraf’s Devolution of Power Plan of 2000 reintroduced the local government system that once again allowed direct election of mayors (*Nazim*). Previously, General Ayub Khan in 1959 and General Zia-ul-Haq in 1979 had also instituted decentralization reforms soon after seizing control of the government (Cheema, Khwaja and Qadir (2006)).<sup>40</sup>

There is a vast amount of quantitative as well as historical evidence that many shrine leaders become mayors following decentralization by military regimes. Malik and Mirza (2019) show that following military coups, there are more contestants and elected politicians whose honorific title is that of the shrine leader (“makhdoom”). For instance, they show that the number of contestants from the shrine elite rose from less than 15% to more than 30% following the 1977 military coup and consequent decentralization by General Zia.

This is consistent with historical accounts documenting how shrine leaders become mayors following military coups. The most prominent example is that of the former Prime Minister of Pakistan, Makhdoom Yousaf Raza Gilani, who became the mayor of Multan following General Zia’s decentralization. Other examples of shrine leaders becoming mayors following military coups include Syed Sajjad Hussain Bukhari, Makhdoom Aamri Shah, Makhdoom Shahabuddin (for more examples, see Aziz (2001) and Martin (2016)).

## 3.2 Data

The shrine data is constructed from two key sources: British Colonial Gazettes and Auqaf Departments of the provincial Ministry of Religious Affairs.<sup>41</sup> The British Colonial Gazettes provide data for all the shrines in Punjab and Sindh, allowing us to cover all the judicial district high courts within Sindh and Punjab provinces.<sup>42</sup> The Pakistan governmental archives at the Provincial Auqaf Departments at the Ministry of Religious Affairs allows us to cover the remaining judicial districts in the provinces of KPK and Baluchis-

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<sup>40</sup>Our theory is robust enough to explain why the military consolidates its power by decentralizing (for more details, see Section 2.5.4).

<sup>41</sup>British Colonial Gazettes were official bulletins of the British government that published public and legal notices aimed at the local population in British India. Under the section fairs and festivals they recorded the names of the shrines as well as the festivals taking place in the Punjab and Sindh province (see Figure B.6 for examples of the raw data and for further discussion of this data source, see Data Appendix B.2.3).

<sup>42</sup>The data for Punjab and Sindh from colonial archives is compiled by the historian Rinchun Ali Mirza, for details see Malik and Mirza (2019). We thank him for sharing this data with us.

tan.<sup>43</sup> By combining these two shrine datasets, we are able to ascertain the number of shrines in every judicial district in Pakistan.<sup>44</sup>

The data on judicial cases come from the central repository of cases, used by lawyers in Pakistan to prepare their cases. We randomly sample 7500 cases from 1986-2016, for all 16 district high courts of Pakistan (from the total number of cases decided in this period) and match our sample with details on all shrines mentioned in British colonial archives and provincial Auqaf departments.<sup>45</sup> Figure II presents the map of shrine density across judicial districts of Pakistan, while Table I reports the descriptive statistics of the variables used in the paper.<sup>46</sup>

Below we describe key outcome and explanatory variables used in the analysis. Further details on the variables, data, their sources and construction can be found in Appendices B.1 and B.2.

*Outcome variables.* The key outcome variable is State Wins. This is a case level measure of judicial independence we use in the paper. It is constructed based on the texts of judgment orders that contains the information on the contents of the case. Following the literature (e.g. Djankov et al. (2003) and La Porta, Lopez-de Silanes and Shleifer (2008)), we asked a law firm to code these variables. In particular, the judicial dependence variable called State Wins is coded as 1 for state victories and 0 for state losses, in all the cases that have the government as a party.<sup>47</sup> This includes the organs of the State yielding executive power such as local government, federal and provincial governmental agencies (in line with the conceptualization of the State as an executive organ in de Secondat Montesquieu (1748).

In the analysis of the quality of judicial decisions, we use two additional outcome variables: Case Delay and Merit, where the unit of observations is also at case level. Both these variables are also constructed based on the information available in the texts of the judgments. The former is calculated by taking the difference between the case decision

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<sup>43</sup>Since the British directly ruled Sindh and Punjab, their official gazettes did not record the shrines of districts outside their geographical boundaries.

<sup>44</sup>We show as part of a robustness check that results are similar using either dataset.

<sup>45</sup>Details on the sampling procedure as well as further information on case-level data collection is presented in Data Appendix B.2.2.

<sup>46</sup>In the baseline regressions, instead of the originally sampled 7500 cases, we end up using 7439 observations. This is because of a few judgments whose text quality prevents detection of the name of the judge so it can be matched with judge characteristics. Nevertheless, running the regression on 7500 observations without judge controls has no significant impact on the qualitative and statistical significance of the results (more details in Appendix B.2.2.

<sup>47</sup>We verify the results by comparing results across two teams of coders (see discussion in Appendix B.2.2 and Table B.1 for correlation coefficient across coders).

year and the filing year. Merit is a measure of the decision’s quality. It is a binary variable, also coded by the law firm, that switches on if the decision is based on evidence rather than technical or procedural grounds (Pound (1963)). This is based on common law jurisprudence, where basing rulings on the merits of a case, i.e. on evidence and the spirit of the law rather than legal technicalities, is considered a measure of quality (see e.g. Tidmarsh (2009) for a discussion). Similarly, legal scholarship in Pakistan argues that basing decisions on case merits is a measure of decision quality in Pakistan (Faqr, Islam and Rizvi (2013), Arshad (2018)).

*Main Explanatory variables.* We use cross-district data on shrine density in 1911 from British colonial archives and Auqaf Department Archives at the Ministry of Religious Affairs in Pakistan.<sup>48</sup> We measure shrine density with shrines per 1000 people in the judicial district. Specifically, we sum all shrines present in the given judicial district in 1911 and normalize this by the population in the district. This allows us to obtain the historical shrine density measure at the (judicial) district level (as presented in Figure II).<sup>49</sup> We also construct a dummy variable for the timing of the military coup, which switches on in 1999, the year when General Musharraf seized control of the government through a military coup.

*Controls: Case, Judge and District Characteristics.* We use a combination of judgment texts, judicial administrative data, bar association and census records to construct the case, judge, and district characteristics used as control variables. The case-characteristics data, like the outcome variables, are obtained from the judgment texts. This includes case characteristics, such as the district where the case was adjudicated, the year when the case was filed, decision year, the full name of the judge(s), the number of judges and lawyers, the case type, a dummy for whether the case involved a land dispute with the government (land cases or “Eminent Domain” cases), and so on. The data on judge characteristics is compiled from the judicial administrative records available at the Registrar Offices of the High Courts of Pakistan and provincial High Court websites. This includes information on judges’ age, education, previous employment and experience. Additional information on the districts where the courts are located is obtained from the census records. All this data

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<sup>48</sup>The Auqaf department records are taken from earliest available year (1950). This is combined with Colonial Gazette records from 1911. This aggregation allows us to cover every district high court jurisdiction in Pakistan. We show that this aggregation is indeed justified, since the results are robust to using either dataset.

<sup>49</sup>Specifically:  $SHRINE_d = (\text{Number of Shrines in the Judicial District}) / (\text{Total Population in the Judicial District}) \times 1000$ .

combined covers 7439 cases and 482 judges across all 16 district High Courts of Pakistan. See Table B.1 for descriptive statistics of all the variables used in the paper.

## 4 Econometric Model

Our empirical analysis is based on the model developed in Section 2. Equation (5) gives the likelihood of judge  $j$ , in district  $d$ , ruling on case  $c$  in favor of the State:

$$SW(\mathbb{E}p_d^*, c, j, d) = \frac{1}{2} + \frac{\sigma(j, d)}{\phi} + \frac{\mathbb{E}p_d^*}{\phi\alpha}, \quad (24)$$

with  $\mathbb{E}p_d^*$  the expected threat that judges face in district  $d$  given in (15), and that we rewrite below:

$$\mathbb{E}p_d^* = N_d^{h*} \pi(p_d^{h*}, p_d^{-h*}) p_d^{h*} + N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) p_d^{l*}.$$

The stochastic parameter  $\sigma(j, d)$  is the bias of judge  $j$ , in district  $d$  toward ruling in favor of the State. To emphasize that  $\sigma(j, d)$  depends on the case, district, judge and the time period, we index it as  $\sigma_{cdjt}$ . We assume that:

$$\frac{\sigma_{cdjt}}{\phi} = \theta - \frac{1}{2} + \Delta_d + \gamma_t + \mathbf{W}'_{cdjt} \Phi, \quad (25)$$

where  $\theta$  is a constant,  $\Delta_d$  and  $\gamma_t$  are district and year fixed effects, whereas  $\mathbf{W}$  denotes potential correlates of judicial outcomes listed as case, judge, and district characteristics, as summarized in Table I.

Let  $Y_{cdjt}$  be the dummy variable, which switches to 1 when judge  $j$ , in district  $d$ , at time  $t$ , rules in favor of the State in case  $c$ . Hence, given (15), (24) and (25), we can express  $Y_{cdjt}$  as:

$$Y_{cdjt} = \theta + \chi_d N_d^{h*} + \delta_d + \gamma_t + \mathbf{W}'_{cdjt} \Phi + \epsilon_{cdjt}, \quad (26)$$

with  $\epsilon_{cdjt}$  a stochastic parameter,  $\chi_d = \frac{\pi(p_d^{h*}, p_d^{-h*}) p_d^{h*}}{\phi\alpha}$ , and  $\delta_d = \Delta_d + \frac{N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) p_d^{l*}}{\phi\alpha}$ .

We use cross-district variation in shrine density, and the exogenous shock of the military coup to the local district high courts to identify the effect of shrine density on judicial outcomes. Specifically, we estimate the following equation:

$$Y_{cdjt} = \theta + \chi \text{COUP}_t \times \text{SHRINE}_d + \delta_d + \gamma_t + \mathbf{W}'_{cdjt} \Phi + \epsilon_{cdjt} \quad (27)$$

$\text{COUP}_t$  is a dummy variable that switches on in the post-coup period, while  $\text{SHRINE}_d$  denotes shrines per 1000 people in a district (i.e.  $M_d/1000$ ). Finally,  $\chi$  is the average treatment effect, which is the average of the  $\chi_d$  parameters, for the districts  $d \in \mathcal{D}$  where  $N_d^{h*} = M_d$ . For the districts where  $N_d^{h*} < M_d$ , the average treatment effect is equal to zero since the number of shrines has no effect on the level of threat exerted by the politicians.<sup>50</sup>

The interaction between  $\text{COUP}_t$  and  $\text{SHRINE}_d$  is the main variable of interest. The coefficient on this interaction,  $\chi$ , is also the differences-in-differences estimator for the impact of shrine density on judicial outcomes following the coup.

**Summing up.** To sum up, we perform a structural estimation of the theory, and test 5 key predictions:

- Prediction 1 is straightforward: judicial decisions should be more biased in favor of the State in districts where there are more religious shrines. The key mechanism underlying this prediction is that religious leaders are more likely to become politicians in places where they enjoy high legitimacy. It is this high legitimacy that also makes these religious leaders particularly crooked politicians (Proposition 1). Hence, in places where there are more shrines, elected politicians are expected to exert more pressure on the Judiciary than their secular counterparts. This prediction also provides a theoretical basis for the main outcome variable used in the empirical exercise, i.e. the fraction of judicial cases won by the State.

If religious leaders associated with religious shrines are able to influence judicial decision-making where they gain political office, then several additional testable implications arise. These are summarized in predictions 2, 3, and 4:

- A direct implication, first, is provided in Prediction 2. Shrines should only be expected to affect judicial decisions in those cases that are politically salient, or that allow elected politicians to capture resources.
- Likewise, prediction 3 stipulates that religious shrines should only affect judicial decisions in cases involving the local government. It is at the local level that the religious elite enjoy high legitimacy.
- The bending of judicial decisions through external pressure by politicians also gives rise to Prediction 4: in districts where there are more shrines, the quality of judicial

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<sup>50</sup>See the related discussion above Prediction 1.

decisions will be lower. In such districts, judges face more threats from elected religious politicians, so they derive less utility. Hence, judges tend to have weaker incentives to exert effort.<sup>51</sup>

- Finally, Prediction 5 explains a historical paradox: that all military regimes in Pakistan decentralized political institutions (Cheema, Khwaja and Qadir (2006)). Actually, this seems to hold beyond Pakistan. Many autocratic regimes in the Muslim world decentralized: Indonesia under Suharto, Saudi Arabia under Abdullah and Yemen under Saleh are just a few examples (Martinez-Bravo et al. (2017)). We demonstrate that through the decentralization reforms, military regimes invite the local religious elite to the political table. Local elections allow military regimes to create the conditions for the rise of a new religious political elite that supports them and to free-ride on the elite’s high legitimacy to extract resources.

## 4.1 Empirical Results

### 4.1.1 The Effect of the Shrines on State Wins

Table II estimates equation (27) and reports the results on the impact of shrine density on State Wins. Consistent with Prediction 1 in Section 2, we observe that one standard deviation increase in shrine density (0.005) increases State Wins by about five percentage points (following the coup). In all specifications, we find a positive and statistically significant estimate of the coefficient on the interaction term between shrine density and post-coup dummy. The coefficients are similar with and without a large number of controls (listed in Table I), implying that the military coup acts as a plausibly exogenous shock to the local district high courts.

Nevertheless, these results hinge on the main identification assumption of the differences-in-differences estimator, that there are no differential pre-trends in State Wins among districts with high and low shrine densities. This is crucial for the causal interpretation of the results. Figure III visually represents the main results by plotting the coefficients on these interaction terms in two-year periods, along with their 90% confidence interval. We find no evidence of differential trends prior to the coup.

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<sup>51</sup>Threats reduce the utility of all judges, including judges biased toward the State, who may be forced to rule in favor of the State beyond their preferred level.

#### 4.1.2 Mechanisms: Local Government Elections and Shrines

In this section, we present evidence consistent with Prediction 3 as well as with historical accounts suggesting that local government elections increased the power of religious leaders associated with shrines (Aziz (2001); Malik and Mirza (2019)). Indeed, local elections were held during the early days of the martial law regime, to give a “democratic cover” or legitimacy to the military regime between January 2000 and September 2001 (Paracha (2003)). Given the lack of time variation and data constraints, we cannot use the timing of the elections to examine this channel. Nevertheless, there was “significant heterogeneity in the extent of implementation” of the local government system (Cheema, Khwaja and Qadir (2006)). The speed of local government system implementation and lack of administrative capacity meant that some districts did not have a functioning local government. In other words, there was some de-facto spatial heterogeneity in the implementation of the local government system due to exogenous and potentially endogenous factors. By the end of the sample period, around 35% of districts did not have a local government ECP (2018). The local government formation process in the district, however, may be endogenous. This is because district (administrative) capacity might be correlated with both differential implementation of the local government system and shrine density.

To mitigate this concern, we exploit the exogenous shock of 9/11 attacks in the United States and the consequent US invasion of Afghanistan in October 2001 that resulted in a refugee crisis, with about 2 million Afghan refugees entering Pakistan (Kronenfeld (2008)). By end of 2001, there were over 4 million Afghan refugees living in Pakistan, where the UNHCR set up camps along the Pakistan-Afghan border (UN (2019)). This put unprecedented pressure on the limited state capacity and resulted in government postponing local elections in Pakistani districts bordering Afghanistan (Chellaney (2001), Cheema, Khwaja and Qadir (2006)). We have enough variation to explore this channel, since Afghanistan and Pakistan share a long land border of 2430 km that covers 25% of the total district high courts in the sample. This allows us to examine the differential impact of shrine density on judicial outcomes for districts that did and did not implement the local government system due to exogenous shock of US invasion of Afghanistan.<sup>52</sup>

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<sup>52</sup>Specifically, *LG Enforced* is switched off for the following district high courts whose district jurisdictions share a border with Afghanistan: Quetta High Court, Khyber High Court, D. I. Khan High Court and Kashmir High Court (see Figure II).



The following equation is estimated:

$$Y_{cjd} = \theta + \lambda \text{COUP}_t \times \text{SHRINE}_d \times \text{LG}_d + \chi \text{COUP}_t \times \text{SHRINE}_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}. \quad (28)$$

The parameter  $\text{LG}_d$  is a dummy variable. It switches on for the districts that do not border Afghanistan, while it is turned off for districts touching the Afghan border. The coefficient of interest here is  $\lambda$ , which measures how much shrine density affects judicial outcomes in districts where local government reform was implemented despite the shock of US invasion of Afghanistan. Table III presents these results. We observe that the estimate of  $\lambda$  is qualitatively and statistically significant. One standard deviation increase in shrine density increases State Wins by about five percentage points. The observed  $\lambda > 0$  implies that in districts that implemented the local government, the impact on State Wins is greater than in districts where the local government formation could not take place. Moreover, we fail to reject the null effect of  $\chi = 0$ . This suggests that the impact of historical shrine density following the coup is observed only in areas where decentralization was enforced and where local religious leaders could rise to political power.

#### 4.1.3 Mechanisms: Types of cases driving the results

Prediction 2 states that the shrines should primarily affect judicial decision-making in the types of cases where the State can capture resources. In this subsection, we test this prediction by exploiting case-level micro data on the type of cases involving the government. Land disputes or “Eminent Domain” cases involving the State are one obvious instance where resources are at stake for the government to capture. Indeed, Coulson (1964) and Platteau (2017) have argued that politicians use land to consolidate their power throughout the Muslim world and that local politicians “instrumentalize” the Judiciary to this end. Thus, consistent with the theory as well as these historical accounts, we test how shrines impact judicial decision-making in land disputes involving the State.<sup>53</sup> These results are reported in Table IV. In the first two columns of Table IV, we estimate equation (27) for cases involving land disputes with the government without and with the full set of controls, respectively. The results indicate that in cases involving land disputes with the

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<sup>53</sup>Examples of raw data based on the texts of judgments of typical cases involving land disputes with the government can be found in Appendix B.2.3 (Figure B.7 and B.8).

government, a one standard deviation increase in shrine density increases State Wins by about eight percentage points.<sup>54</sup>

Tangible resources are not the only resources that governments may want to expropriate. Our model is robust enough to account for the government expropriation of political rights reported in anecdotal accounts from many Muslim majority countries where incumbent politicians consolidate their power by suppressing human rights (Sait and Lim (2006)). A prominent example from Pakistan is the expropriation of the political right to citizenship, when the citizenship of an opposition leader was “cancelled” just days before he was to lead a protest against the government (Naseer (2019)). Therefore, we consider next how the military coup and shrine density impacted human rights cases involving the State. We define human rights cases as constitutional petitions that do not involve land disputes with the government. These cases are separately marked as writ petitions within the constitutional cases and pertain to violation of fundamental rights such as freedom of movement, freedom of assembly, or discrimination based on religion, gender and caste.<sup>55</sup> We observe qualitatively and statistically meaningful impact of shrines in human rights cases: a one standard deviation increase in shrine density increases State Wins by about seven percentage points (Column 3 and 4, in Table IV). This is also consistent with (Aziz, 2001, p. 159), who notes that shrine elites violate the fundamental right to an education where “even the most superficial kind of public instruction might push some of his spiritual slaves out of their prison of superstition and unthinking obedience. Education is a plague which he does not want his flock to catch”. Likewise, Malik and Mirza (2019) document how districts in Punjab with higher shrine density spend less on public education and have lower literacy rates.

In contrast to politically salient cases, politicians may have little incentive to affect judicial decisions in cases where coveted resources are not at stake. For instance, every-day criminal cases involving theft or burglary may be considered *relatively* less politically salient than land and political rights cases. To further examine the political influence channel, we conduct a placebo test where we evaluate the impact of shrine density on State Wins for criminal cases, where the State acts as the prosecution (State Wins here can

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<sup>54</sup>This is also consistent with anecdotal accounts from Pakistan (see, for instance, Sattar (2017), Hanif (2019)).

<sup>55</sup>Other examples of such cases in the dataset include when a woman pleads that her right to an education was denied based on her gender or when a journalist pleads that his fundamental right to freedom of movement within and outside Pakistan was restricted by the government based on a report he wrote criticizing the incumbent government (Jazeera (2016)).

be interpreted as conviction rates). Table [V](#) presents these results. We find none of the coefficients statistically significant. In fact, in most specifications, the coefficient estimates corresponding to the interaction terms of interest are negative. Thus, State Wins increase with shrine density only in land and political rights disputes with the government, not in everyday criminal cases. This is consistent with the political influence channel, where we observe the impact of shrines only when the stakes include resources of value to politicians.

Next, we test our theoretical prediction that the shrines will only impact judicial decisions in cases involving the local government. If religious leaders gain local political office, we would expect an impact on cases involving the local government. Consistent with this prediction, we observe shrine density impact only in cases involving disputes with the local government, while we observe no significant effect on cases involving the provincial or federal government. Table [VI](#) presents these results, with State Wins divided into its component parts, the State being the local, provincial and federal government, respectively. The results strongly suggest that shrine density following the coup only impacts disputes with the local government consistent with Prediction [3](#).

#### 4.1.4 Does the increase in State Wins imply a deterioration in the quality of judicial decisions?

Finally, we test Prediction [4](#) that the quality of judicial decisions will be lower in districts where there are more shrines. Consistent with this, we show that the increase in State Wins following the coup reflects a deterioration in the quality of judicial decisions.

In the theory section, we have established that the utility of a judge, decreases linearly with the threats he faces from politicians.<sup>56</sup> Hence, following the steps of the econometric model at the beginning of this section, we can express our proxy of judicial quality  $Y_{cjd}$  as:

$$Y_{cjd} = \theta + \chi_d M_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}. \quad (29)$$

We once again use cross-district variation in shrine density and the shock of the military coup to the local district high courts to identify the effect of shrine density on decision quality. The specification that allows for identification can, again, be written as:

$$Y_{cjd} = \theta + \chi \text{COUP}_t \times \text{SHRINE}_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}, \quad (30)$$

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<sup>56</sup>It is demonstrated in Appendix [A.5](#) that equation [\(19\)](#) can be rewritten as a linear function of the expected threat. See equation [\(A.39\)](#).

with  $Y_{cjd}$  denoting Case Delay instead of State Wins. Case Delay is the difference between decision year and filing year, representing the time it takes for the case to be decided. Table VII (Panel A) presents these results by type of case. Overall, a one standard deviation increase in shrine density implies an increase in case delay of about 0.2 years (or 2.5 months). Consistent with what was observed earlier, the results only concern cases involving land and human rights disputes with the government, whereas we fail to reject the null effect of no increased delay in criminal cases.

State Wins and Case Delay can be interpreted as separate outcome variables: the former is a measure of judicial independence, while the latter is a proxy for judicial efficiency. Nevertheless, there is good reason to believe that in the current context, State Wins and Case Delay may be linked. Several anecdotal accounts suggest that judges delay cases as a strategy favoring governments. This becomes obvious when government officials use the expropriated land for their private benefit while the court case is pending, or when there is no ruling in cases where the government position is particularly weak (Zafar (2012)). The null effect in criminal cases for Case Delay is consistent with this interpretation.

It could be reasoned, however, that the increase in case delay following the coup may stem from more thorough deliberation. If that were true, increased case delay would imply an improvement in the quality of judicial decisions. Yet our confidence that the increase in State Wins and Case Delay following the coup implies a deterioration in the quality of judicial decisions is strengthened when we examine cases decided on the ‘merits’. In common law jurisprudence, rulings on case merits imply that the judicial decision is based on evidence rather than taken on technical or procedural grounds (Pound (1963)). Indeed, legal scholarship in Pakistan also argues that making decisions on the merits is a measure of decision quality (Arshad (2018)). We use this as a measure of quality of the judicial decision. We examine the quality of the decisions, by examining how historical shrine density differentially impacted decision-making on case merits following the coup. Table VII (Panel B) reports these results by type of case. The overall estimates imply that a one standard deviation increase in shrine density decreases judicial decision quality by about 6 percentage points (Table VII, Panel B, Column, 1). The point estimates imply that the largest reduction in decision quality is observed in cases involving land disputes with the government, whereas there seems to be no change in the quality of decisions in criminal cases (the coefficient in criminal cases is positive, though statistically insignificant). The increase in State Wins and Case Delay and decrease in decisions taken on the merits in high shrine density areas for land and political rights cases alone is also consistent with

Prediction 2: politicians exert pressure on judges in cases where valuable resources are at stake.

## 4.2 Robustness

### 4.2.1 Are we picking up the effect of confounding interactions with the Coup?

It is important to note that, even in the absence of pre-trends, there could be confounding interactions with the coup. In particular, results could be driven by differences in type of cases or judges before and after the coup. We provide evidence against these potentially confounding interactions.

The first possible interaction is that judicial cases filed following the coup in high shrine-density districts could differ from those filed before the coup. If, for example, loss of faith in the judicial system following the coup or religious leaders' behavior alter the type of cases filed, then we could be picking up the effect of strategic filing of cases instead of the effect of the shrines. In Figure IV (panel A), we show that in high shrine-density areas there are no significant changes in type of constitutional or criminal cases filed following the coup implying we are unlikely to confuse the results with differences in case composition.<sup>57</sup> The second potential interaction is that there could be different judges in high shrine-density districts following the coup. This is possible, since following the 1999 military coup, some judges 'resigned' in protest. If the most independent judges left the courts, then the numerous State Wins we observe in high shrine-density districts could reflect the effect of this exit of judges. However, this is unlikely for two reasons. One, less than 3% of judges in the district High Courts resigned following the 1999 military coup, and two, we find evidence that judge characteristics in high and low shrine density districts are similar before and after the coup. Specifically, in Figure IV (panel B), we show that high shrine-density districts do not have more experienced or particularly corrupt judges following the coup.<sup>58</sup> Identical results are found for other available judge characteristics (see Figure B.1 in Empirical Appendix B.3 for these results). These results suggest that our findings are unlikely to be confounded with case or judge characteristics interacting with the coup.

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<sup>57</sup>Identical results are obtained for land and human rights cases or other available case characteristics.

<sup>58</sup>We proxy experience by tenure of the judge and corruption by a dummy that switches on if the judge accepted a house from the Prime Minister.

#### 4.2.2 Are the estimates reflecting particularly high judicial dependence before the coup?

The positive and statistically significant coefficient estimate of  $\chi$  in equation (27) does not necessarily reflect an increase in judicial dependence in high shrine-density districts following the coup. It is possible that the increase in State Wins following the coup in high shrine-density districts is a correction of particularly low State Wins in these districts prior to the coup. For example, the military dictator could restore balance by correcting the disproportionately low State Wins in high shrine-density districts prior to the coup. We explore this possibility by examining the average State Wins in historically high and low shrine-density districts before and after the coup. If State Wins is decreasing in shrine density prior to the coup, while following the coup State Wins is constant for high and low shrine density districts, then the observed  $\chi > 0$  might indeed reflect the post-coup correction of particularly low State Wins prior to the coup in the high shrine-density districts.

Figure V plots average State Wins and shrine densities before and after the coup. We observe that State Wins is roughly constant prior to the coup, whereas average State Wins is increasing in shrine density following the coup.<sup>59</sup> This observation is robust to both district-wide averages (left panel) as well as district-year averages (right panel).<sup>60</sup> This supports the argument that following the coup, the increase in State Wins is not a correction of particularly low pre-coup State Wins in high shrine-density districts.

#### 4.2.3 Alternative Explanation

One key alternative explanation that might be driving the results is the 17<sup>th</sup> Amendment to the Constitution of Pakistan passed in December 2003. This amendment included a package of reforms that gave legislative support to the military coup of 1999.<sup>61</sup> Nevertheless, this legislation had an important clause that might have impacted the Courts: Presidential power to “dissolve national assemblies” was subjected to judicial review by the Supreme Court. This could be an alternative mechanism driving the results, if local district high

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<sup>59</sup> Similar results hold for Case Delay and Merit decisions. Figure B.11 in Appendix C shows that case delay is roughly constant prior to the coup and increases sharply following the coup. Likewise, Merit decisions is roughly constant prior to the reform, whereas it falls steeply following the coup B.12.

<sup>60</sup> The district-year averages are a more relevant comparison, since we exploit variation across district-years in the regression results.

<sup>61</sup> This was required to preempt further litigation against General Musharraf, since under the Pakistani constitution, a military coup is “high treason punishable by death” (Constitution of Pakistan (2018)).

courts followed the precedents of higher State Wins set by the Supreme Court following the coup (as in [Chen, Frankenreiter and Yeh \(2016\)](#)). It could be that the Supreme Court judges wanted to signal compliance with the military regime by ruling in favor of local religious leaders, and the lower courts followed suit.<sup>62</sup>

We examine this alternative channel by estimating the following equation:

$$Y_{cjd} = \theta + \chi \text{ COUP}_t \times \text{SHRINE}_d + \rho \text{ AMENDMENT}_t \times \text{SHRINE}_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}. \quad (31)$$

All variables are similar to those defined above, except for the additional interaction term of shrine density with a dummy  $\text{AMENDMENT}_t$ . This dummy switches on for the period that this law was in effect (2004-2009).<sup>63</sup> Table VIII (column 1 and 2) presents these results. We observe that there are no differential effects on State Wins over the baseline impact of shrines following the coup.

#### 4.2.4 Additional Sensitivity Checks

In this subsection we present additional robustness checks. First, we demonstrate the robustness of the results by showing that the results are similar when we exclude potential outlier districts. Second, we show that the results are insensitive to choice of shrine dataset.

Figure V shows that shrine density is particularly high in some districts (for instance, Sukkur and Bahawalpur have 0.015 and 0.013 shrines per 1000 people compared to the average 0.005). It could be that the positive relationship between shrine density and State Wins we observe post-coup is primarily driven by changes occurring in these potentially ‘outlier’ districts. To examine this possibility, we estimate the following equation:

$$Y_{cjd} = \mu + \chi \text{ COUP}_t \times \text{SHRINE}_d + \theta \text{ COUP}_t \times \text{SHRINE}_d \times \text{OUTLIERS}_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}. \quad (32)$$

The equation above is similar, except that it has an additional interaction term, where the key variable of interest  $\text{COUP}_t \times \text{SHRINE}_d$  is interacted with the variable  $\text{OUTLIERS}_d$ .

<sup>62</sup>We do not have a common identifier for cases across the High and Supreme Courts to empirically examine this dependence.

<sup>63</sup>This law went into effect in January 2004 and was abolished in early 2010 after the democratic government passed the 18<sup>th</sup> Amendment to the Constitution of Pakistan that took away the President’s power to dismiss parliament (making judicial review of the act redundant).

This variable switches on for all districts, except for the outlier districts of Bahawalpur and Sukkur. Column 3 and 4 of Table VIII presents these results, without and with the full set of controls, respectively. We observe no differential effect of exclusion of outliers on judicial outcomes.<sup>64</sup>

Likewise, since we combine two datasets to obtain shrine density data across all district courts of Pakistan (i.e. from British Colonial Gazettes as in Malik and Mirza (2019) and Auqaf Department, Ministry of Religious Affairs), we test for dependency on choice of dataset. Similar to the outlier exclusion test described above, we construct a dummy variable, GAZETTE<sub>d</sub>, that switches on when the shrine data is from the Colonial Gazettes and takes the value zero if it is from the Auqaf Department. The following equation is estimated:

$$Y_{cjd} = \zeta + \chi \text{ COUP}_t \times \text{SHRINE}_d + \phi \text{ COUP}_t \times \text{SHRINE}_d \times \text{GAZETTE}_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \Phi + \epsilon_{cjd}. \quad (33)$$

The results in Table VIII (column 5 and 6) show no differential effect of data being from the Colonial Gazettes. Taken together these results suggest that they are not driven by outliers nor by choice of shrine dataset.

We also examine the robustness of the results to the 17<sup>th</sup> amendment, exclusion of potential outliers and choice of shrine dataset for Case Delay and Merit Decisions variables, where we obtain similar results.<sup>65</sup> Finally, we demonstrate that the results are robust to alternative levels of clustering. Throughout the paper, we cluster standard errors at the most conservative district level. Nevertheless, we obtain similar results if we cluster within each district separately before and after the coup (Bertrand, Duflo and Mullainathan (2004)) or cluster within each district-year combination, i.e. the level of variation of the interaction term (Figure B.2 in Appendix B.3 presents these results).

## 5 Concluding Remarks

In this paper, we demonstrated that a reduction in the separation between Church and State can be especially corrosive to political institutions. When religious leaders use their

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<sup>64</sup>Note:  $\theta = 0$  and  $\chi > 0$  implies no differential effect of these outlier districts since  $dY/dShrines = \chi$ . Likewise, we obtain similar results if we exclude the lowest shrine-density districts.

<sup>65</sup>These robustness tests are presented in Table B.2 in Empirical Appendix B.



high legitimacy to gain political office, their revered status also makes them particularly corrupt politicians. We provided both a theoretical framework and estimated the structural equations of our theory.

We establish four main results. First, religious leaders are more likely to become politicians in places where they enjoy high legitimacy. In these places, when elected, religious politicians exert more pressure on judicial decision-making than their secular counterparts. Second, religious leaders only impact politically salient cases. Third, the fall in rulings in favor of the government also reflects a deterioration in decision quality. Finally, reduced separation between Church and State entrenches autocrats. Decentralization reform – by reducing the distance between Church and State – provide a unique natural experiment that reveals the consequences of an increase in the political power of religion. In particular, it enables empirical examination of how religion affects the functioning of State institutions.

Our empirical analysis is based on the structural equations of the model, and applies the theory to the case of Pakistan, the second largest Muslim-majority country in the world, where religion plays a central role in State and society. We constructed unique datasets on 13<sup>th</sup> century holy Muslim shrines, spread across Pakistan, and collected case-level micro data on judicial cases adjudicated in the district high courts.

We provide evidence consistent with the theoretical predictions of the model. First, districts with higher historical shrine density show a large increase in government victories following the military coup. Second, shrines density only impacts judicial decisions in places where the local government system was implemented. Third, government victories are only observed in cases where valuable resources are available to be captured and where the local government is involved. Fourth, an increase in government victories also implies a fall in the quality of judicial decisions. These results are robust to a battery of sensitivity tests, and alternative explanations for the findings.<sup>66</sup>

We suggested in this paper that, beyond the threat of obscurantism typically associated with widespread religious belief, religion also profoundly affects the building of the State. It may even trigger institutional reforms, such as political decentralization, that may have major repercussions on the path to prosperity in our societies. For these reasons, the political economy of religion deserves to be the focus of greater attention in future works.

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<sup>66</sup>For instance, we find no evidence of pre-trends or potentially confounding interactions with the coup.

## References

- Acemoglu, D. and J.A. Robinson. 2019. *The Narrow Corridor: States, Societies, and the Fate of Liberty*. Penguin Publishing Group.
- Alesina, Alberto and Eliana La Ferrara. 2014. “A Test of Racial Bias in Capital Sentencing.” *American Economic Review* 104(11):3397–3433.
- Anderson, Siwan. 2018. “Legal origins and female hiv.” *American Economic Review* 108(6):1407–39.
- Arshad, Javed. 2018. “Rule of Law in Pakistan.” *Punjab Bar Council Press* .
- Ash, Elliott and W Bentley MacLeod. 2019. The performance of elected officials: Evidence from state supreme courts. Technical report National Bureau of Economic Research.
- Auriol, Emmanuelle and Jean-Philippe Platteau. 2017. “Religious co-option in autocracy: A theory inspired by history.” *Journal of Development Economics* 127:395 – 412.
- Auriol, Emmanuelle, Jean-Philippe Platteau and Thierry Verdier. 2019. The Quran and the Word - The Strategic Game Between Autocratic Power, the Military, and the Clerics. Technical report EDI Working Paper Series.
- Aziz, K. K. 2001. *Religion, land and politics in Pakistan: a study of Piri-Muridi*. Vanguard.
- Balas, Aron, Rafael La Porta, Florencio Lopez-de Silanes and Andrei Shleifer. 2009. “The divergence of legal procedures.” *American Economic Journal: Economic Policy* 1(2):138–62.
- Barro, Robert J and Rachel McCleary. 2019. *The Wealth of Religions: The Political Economy of Believing and Belonging*. Princeton University Press.
- Barro, Robert and Rachel McCleary. 2006. “Religion and Economy.” *Journal of Economic Perspectives* .
- Bazzi, Samuel, Gabriel Koehler-Derrick and Benjamin Marx. 2019. The Institutional Foundations of Religious Politics: Evidence from Indonesia. Technical Report 25151 Quarterly Journal of Economics.

- Belloc, Marianna, Francesco Drago and Roberto Galbiati. 2016. “Earthquakes, Religion, and Transition to Self-Government in Italian Cities.” *The Quarterly Journal of Economics* 131(4):1875–1926.
- Bertrand, Marianne, Esther Duflo and Sendhil Mullainathan. 2004. “How much should we trust differences-in-differences estimates?” *The Quarterly journal of economics* 119(1):249–275.
- Besley, Timothy and Stephen Coate. 1997. “An Economic Model of Representative Democracy.” *The Quarterly Journal of Economics* 112(1):85–114.
- Bisin, Alberto, Avner Seror and Thierry Verdier. 2019. Religious legitimacy and the joint evolution of culture and institutions. In *Advances in the Economics of Religion*, ed. Jean-Paul Carvalho, Sriya Iyer and Jared Rubin. Palgrave Macmillan.
- Bordalo, Pedro, Nicola Gennaioli and Andrei Shleifer. 2015. “Salience Theory of Judicial Decisions.” *Journal of Legal Studies* 44(S1):S7–S33.
- Bose, Sugata and Ayesha Jalal. 2017. *Modern South Asia: history, culture, political economy*. Routledge.
- Bueno de Mesquita, Ethan and Bruce Bueno de Mesquita. 2019. From Investiture to Worms: A Political Economy of European Development and the Rise of Secular Authority. Technical report.
- Campante, Filipe and David Yanagizawa-Drott. 2015. “Does Religion Affect Economic Growth and Happiness? Evidence from Ramadan.” *Quarterly Journal of Economics* 130(2):615–658.
- Carvalho, Jean-Paul. 2012. “Veiling.” *The Quarterly Journal of Economics* 128(1):337–370.
- Chaney, Eric. 2013. “Revolt on the Nile: Economic Shocks, Religion, and Political Power.” *Econometrica* 81(5):2033–2053.
- Chaney, Eric. 2018. Religion, Political Power and Human Capital Formation: Evidence from Islamic History. In *Advances in the Economics of Religion*, ed. Jean-Paul Carvalho, Sriya Iyer and Jared Rubin. Palgrave Macmillan pp. 437–448.

- Cheema, Ali, Asim Khwaja and Adnan Qadir. 2006. "Local Government Reforms In Pakistan: Context, Content And Causes." *Decentralization and local governance in developing countries: A comparative perspective* .
- Chellaney, Brahma. 2001. "Fighting Terrorism in Southern Asia: The Lessons of History." *International Security* 26(3):94–116.
- Chen, Daniel L., Jens Frankenreiter and Susan Yeh. 2016. Judicial Compliance in District Courts. IAST Working Papers 16-55 Institute for Advanced Study in Toulouse (IAST).
- Clingingsmith, David, Asim Khwaja and Michael Kremer. 2009. "Estimating the Impact of The Hajj: Religion and Tolerance in Islam's Global Gathering." *The Quarterly Journal of Economics* 124:1133–1170.
- Constitution of Pakistan, Constitution of Pakistan. 2018. *The Constitution of Pakistan*).
- Coulson, Noel. 1964. *A history of Islamic law*. Routledge.
- de Secondat Montesquieu, Charles. 1748. *De l'esprit des lois*. De l'esprit des lois Firmin-Didot frères, fils et Cie (Paris), 1857.
- Djankov, Simeon, Rafael LaPorta, Florencio Lopez de Silanes and Andrei Shleifer. 2003. "Courts." *Quarterly Journal of Economics* 118(2):453–517.
- ECP. 2018. "ECP: LOCAL GOVERNMENT ELECTIONS." <https://www.ecp.gov.pk/frmGenericPage.aspx?PageID=3043>.
- Fair, C Christine, Rebecca Littman and Elizabeth R Nugent. 2018. "Conceptions of Sharia and support for militancy and democratic values: evidence from Pakistan." *Political Science Research and Methods* 6(3):429–448.
- Faqir, Khan, Fakhrul Islam and Shahid Hassan Rizvi. 2013. "The lawyers movement for judicial independence in Pakistan: A study of Musharraf regime." *Asian Journal of Social Sciences & Humanities* 2(2):345–357.
- Faruqui, Munis D. 2012. *The princes of the Mughal empire, 1504–1719*. Cambridge University Press.
- Feldman, Shelley and Charles Geisler. 2012. "Land expropriation and displacement in Bangladesh." *The Journal of Peasant Studies* 39(3-4):971–993.

- Gennaioli, Nicola and Andrei Shleifer. 2007. "The Evolution of Common Law." *Journal of Political Economy* 115(1):43–68.
- Gilmartin, David. 1988. *Empire and Islam: Punjab and the making of Pakistan*. University of California Press Berkeley.
- Glaeser, Edward L and Andrei Shleifer. 2002. "Legal origins." *The Quarterly Journal of Economics* 117(4):1193–1229.
- Hanif, Mohammad. 2019. "Your House Is My House, Pakistans Rich Say to Its Poor." *The New York times* .  
**URL:** <https://www.nytimes.com/2019/05/28/opinion/pakistan-property-land-boom.html>
- Husain, Waris. 2018. *The Judicialization of Politics in Pakistan: A Comparative Study of Judicial Restraint and Its Development in India, the US and Pakistan*. Routledge.
- Iyer, Sriya. 2016. "The New Economics of Religion." *Journal of Economic Literature* 54(2):395–441.
- Jamali, Hafeez A. 2015. "Mathew S. Hull, Government of Paper: The Materiality of Bureaucracy in Urban Pakistan.".
- Jazeera, Al. 2016. "Pakistan: Cyril Almeida of Dawn 'on Exit Control List'." <https://www.aljazeera.com/news/2016/10/pakistan-cyril-almeida-dawn-exit-control-list-161010204921917.html>.
- Jefferson, Thomas. 1802. "Jefferson's Letter to the Danbury Baptists.".  
**URL:** <https://www.loc.gov/loc/lcib/9806/danpre.html>
- Kronenfeld, Daniel A. 2008. "Afghan Refugees in Pakistan: Not All Refugees, Not Always in Pakistan, Not Necessarily Afghan?" *Journal of Refugee Studies* 21(1):43–63.
- Kuran, Timur. 2011. *The long divergence : how Islamic law held back the Middle East*. Princeton Oxford: Princeton University Press.
- La Porta, Rafael, Florencio Lopez-de Silanes and Andrei Shleifer. 2008. "The Economic Consequences of Legal Origins." *Journal of Economic Literature* 46(2):285–332.

- La Porta, Rafael, Florencio Lopez-de Silanes, Cristian Pop-Eleches and Andrei Shleifer. 2004. "Judicial checks and balances." *Journal of Political Economy* 112(2):445–470.
- Lim, Claire SH. 2013. "Preferences and incentives of appointed and elected public officials: Evidence from state trial court judges." *American Economic Review* 103(4):1360–97.
- Malik, Adeel and Rinchan Ali Mirza. 2019. Pre-colonial Religious Institutions and Development: Evidence through a Military Coup. CSAE Working Paper Series 2018-04 Centre for the Study of African Economies, University of Oxford.
- Malik, Asad. 2019. "SC to hear illegal Waqf property case." <https://www.dawn.com/news/1481586>.
- Martin, Nicolas. 2016. *Politics, landlords and Islam in Pakistan*. New Delhi: Routledge.
- Martinez-Bravo, Monica, Gerard Padró I Miquel, Nancy Qian and Yang Yao. 2017. The Rise and Fall of Local Elections in China: Theory and Empirical Evidence on the Autocrat's Trade-off. Technical report National Bureau of Economic Research.
- Naseer, Tahir. 2019. "IHC suspends decision to cancel JUI-F leader Hafiz Hamdullah's citizenship." <https://www.dawn.com/news/1513576>.
- North, Douglass C and Barry R Weingast. 1989. "Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England." *The journal of economic history* 49(4):803–832.
- Osborne, Martin J. and Al Slivinski. 1996. "A Model of Political Competition with Citizen-Candidates." *The Quarterly Journal of Economics* 111(1):65–96.
- Paracha, S.A. 2003. "Devolution Plan in Pakistan: Context, implementation and issues." *Open Society Institute* .
- Persson, T. and G.E. Tabellini. 2002. *Political Economics: Explaining Economic Policy*. Zeuthen lecture book series MIT Press.
- Platteau, Jean-Philippe. 2008. "Religion, politics, and development: Lessons from the lands of Islam." *Journal of Economic Behavior Organization* 68(2):329 – 351.
- Platteau, Jean-Philippe. 2011. "Political Instrumentalization of Islam and the Risk of Obscurantist Deadlock." *World Development* 39(2).

- Platteau, J.P. 2017. *Islam Instrumentalized*. Cambridge Studies in Economics, Choice, and Society Cambridge University Press.
- Posner, R.A. 1983. *The Economics of Justice*. Harvard University Press.
- Pound, R. 1963. *The Spirit of the Common Law*. Dartmouth alumni lectureships on the Guernsey Center Moore Foundation Beacon Press.
- Ran, Tao. 2011. "Chinas land grab is undermining grassroots democracy." *The Guardian* 16.
- Rubin, J. 2017. *Rulers, Religion, and Riches: Why the West Got Rich and the Middle East Did Not*. Cambridge Studies in Economics, Choice, and Society Cambridge University Press.
- Sait, Siraj and Hilary Lim. 2006. *Land, law and Islam: property and human rights in the Muslim world*. Vol. 1 Zed Books.
- Saleh, Mohamed and Jean Tirole. 2019. "Taxing Identity: Theory and Evidence from Early Islam."
- Sattar, B. 2017. "Legal eye: Daylight robbery." *The News* .  
**URL:** <https://www.thenews.com.pk/print/240307-Legal-eye-Daylight-robbery>
- Seror, Avner. 2018. "A theory on the evolution of religious norms and economic prohibition." *Journal of Development Economics* 134(C):416–427.
- Seror, Avner and Thierry Verdier. 2020. A Theory of Voting and Political Competition. Technical report.
- Shayo, Moses and Asaf Zussman. 2011. "Judicial ingroup bias in the shadow of terrorism." *The Quarterly Journal of Economics* 126(3):1447–1484.
- Siddiqi, Ayesha. 2017. *Military Inc.: inside Pakistans military economy*. Penguin Random House India.
- Suvorova, A. A. 2004. *Muslim saints of South Asia : the eleventh to fifteenth centuries*. London New York: Routledge.

- Tidmarsh, Jay. 2009. "Resolving Cases 'On the Merits'." *Denver University Law Review* 87.
- Tullock, G. 1980. Efficient Rent Seeking. In *Toward a Theory of Rent Seeking Society*, ed. Tollison R. Buchanan, J. and G. Tullock. Texas A and M University Press.
- UN, World Population Meter:. 2019. "Pakistan Population." <https://www.worldometers.info/world-population/pakistan-population/>.
- UNHCR. 2019. "UNHCR Pakistan." <https://www.unhcr.org/pakistan.html>.
- Voigt, Stefan, Jerg Gutmann and Lars Feld. 2015. "Economic growth and judicial independence, a dozen years on: Cross-country evidence using an updated Set of indicators." *European Journal of Political Economy* 38(C):197–211.
- Warraich, Suhail. 2017. "Indias Supreme Court Is Teetering on the Edge." <https://www.thenews.com.pk/tns/detail/564614-pirs-politicians-2>.
- Zafar, A. 2012. "How true judicial independence can be achieved." *Express Tribune* .  
**URL:** <https://tribune.com.pk/story/372183/how-true-judicial-independence-can-be-achieved/>



# Figures

Figure I: Judicial decision-making

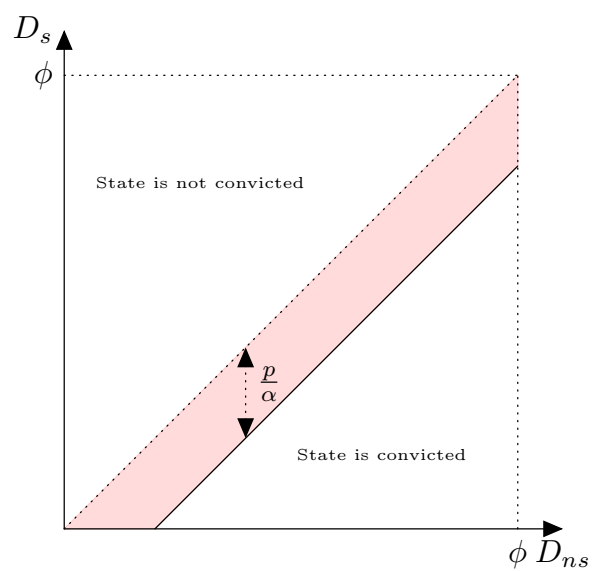
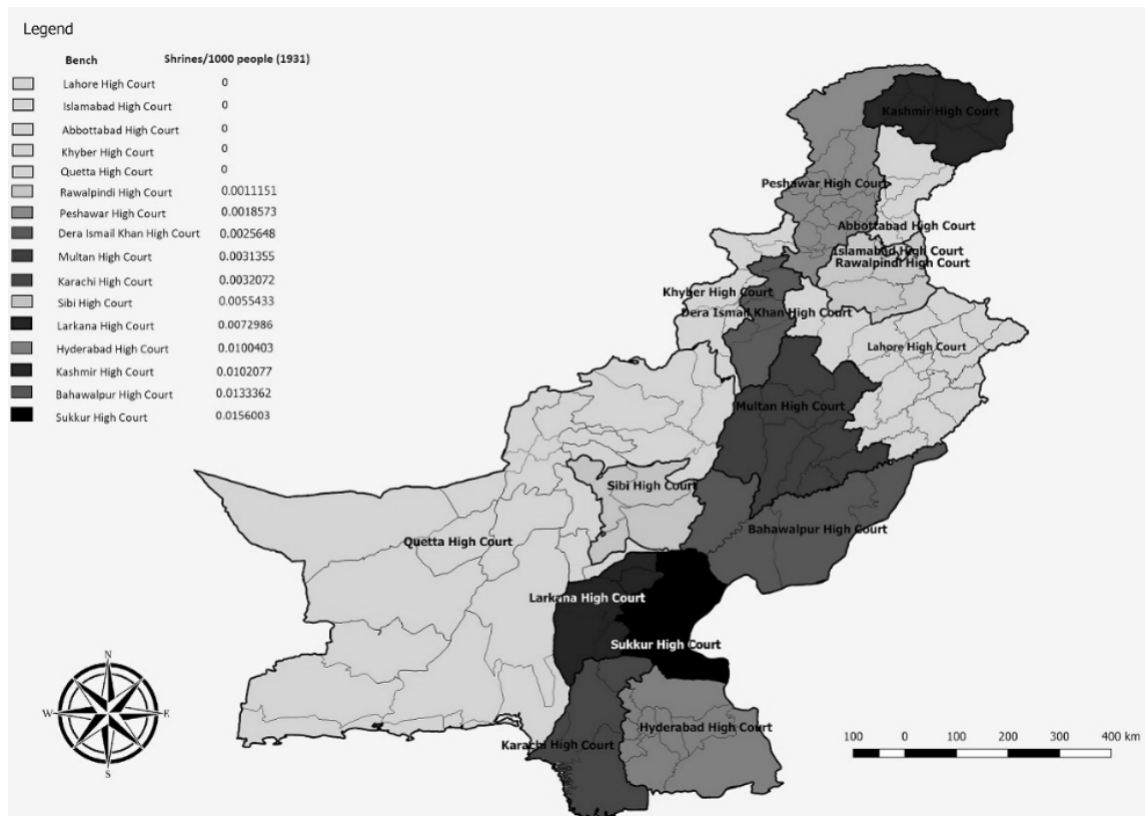
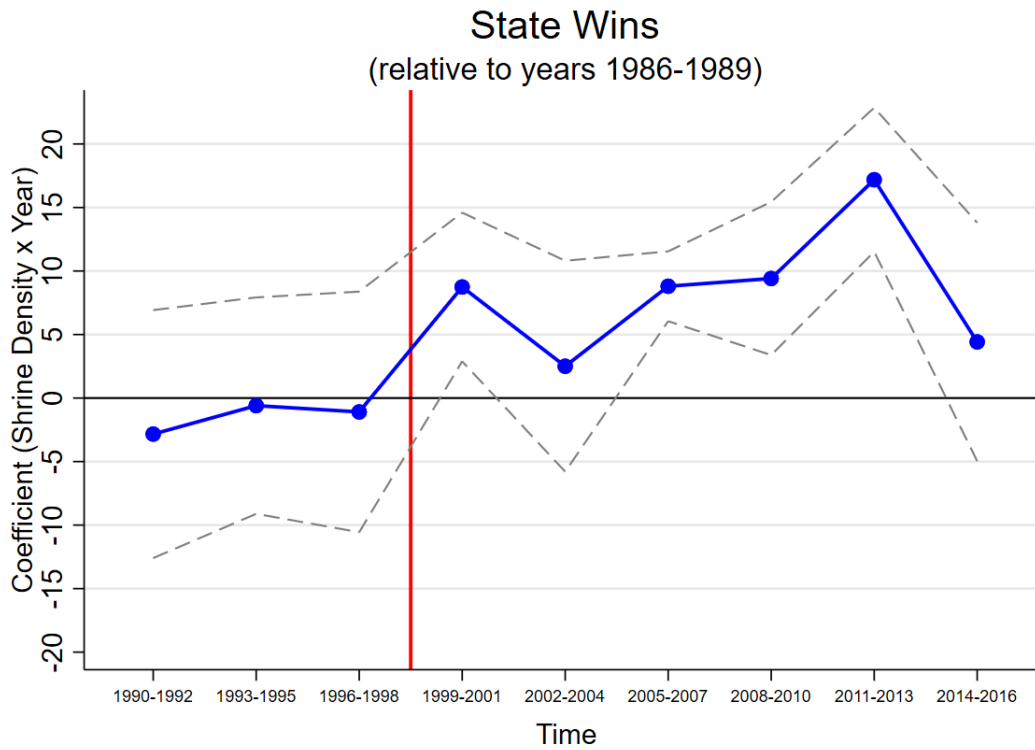


Figure II: Map of Shrine Density in Judicial Districts of Pakistan



*Note:* The shrine data covers all of Pakistan; shrine density is computed by total number of shrines in the jurisdiction divided by the population.

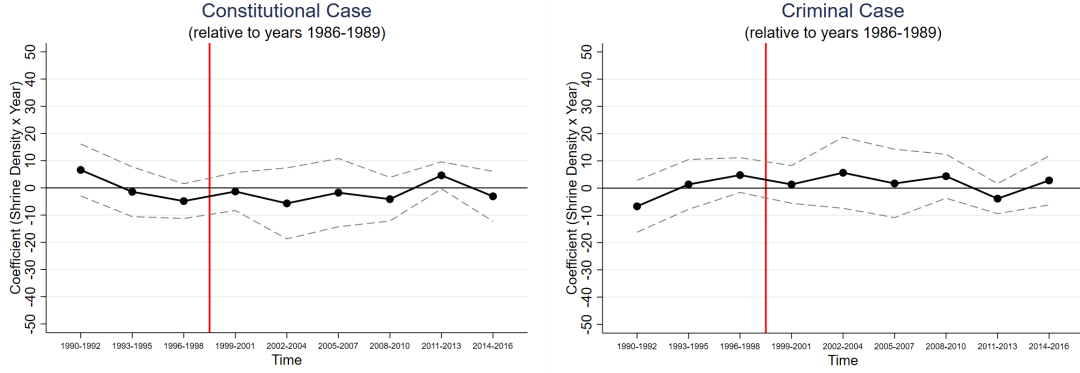
Figure III: Time-varying impact of military coup (90% CI)



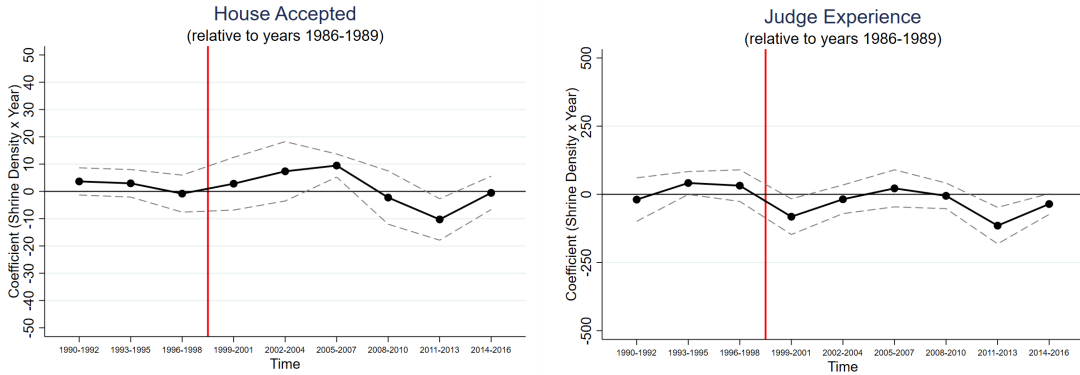
*Note:* The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of State Wins on 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. Cross-sections between 1986 to 1989 are held as the comparison group. The vertical line marks the timing of the military coup in 1999. Standard errors are clustered at the district level. Similar results are found for alternate levels of clustering (see Figure B.2 in Appendix B.3).

Figure IV: Potentially Confounding Interactions with the Coup

(a) Case Characteristics (Constitutional and Criminal Cases)



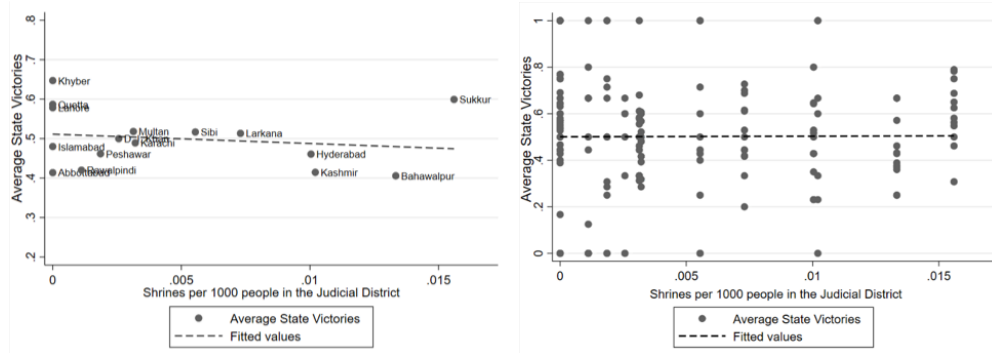
(b) Judge Characteristics (House Accepted and Judge Experience)



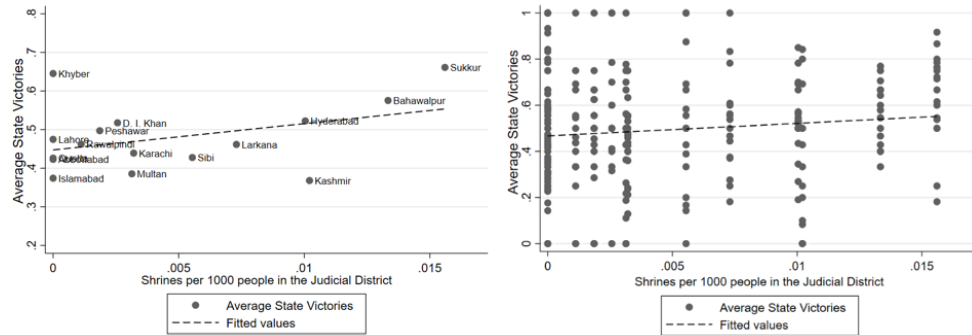
Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of case or judge characteristics on 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. Cross-sections between 1986 to 1989 are held as the comparison group. The vertical line marks the timing of the military coup in 1999. Similar plots for other case and judge characteristics can be found in Figure B.1 Appendix B.3.

Figure V: Shrines and Average State Wins Before and After the Coup

(a) Shrines and Average State Wins Before Coup (1986-1998)



(b) Shrines and Average State Wins After Coup (1999-2016)



Note: The figures on the left averages State Wins by the district regardless of the year; figures on the right provides an average for each district for a given year. Similar plots for Case Delay and Merit decisions can be found in Appendix B.3 (Figure B.11 and B.12, for case delay and Merit, respectively).

## Tables

Table I: Descriptive statistics of the variables used in the study

Panel A: Case Characteristics					
Variables	Observations	Mean	Std. Dev.	Min	Max
State Wins	7,439	0.50	0.50	0	1
Case Delay	7,439	3.33	2.47	0	23
Merit	7,439	0.62	0.48	0	1
Year Filed	7,439	1999.69	9.53	1970	2016
Year Decision	7,439	2003.03	8.88	1986	2016
Constitutional Cases	7,439	0.72	0.44	0	1
Land Cases	7,439	0.41	0.49	0	1
Human Rights Cases	7,439	0.31	0.46	0	1
Criminal Cases	7,439	0.28	0.44	0	1
Pages of Judgement Order	7,439	8.88	7.71	1	81
Number of Lawyers	7,439	4.04	3.62	1	32
Number of Judges on a case	7,439	1.81	0.84	1	5
Chief Justice on Bench	7,439	0.06	0.24	0	1
Panel A: Judge Characteristics					
Variables	Observations	Mean	Std. Dev.	Min	Max
Tenure at Decision	482	4.10	3.64	8.46	22
Gender	482	0.95	0.19	0	1
PM Assistance Package	482	0.33	0.47	0	1
Promoted to SC	482	0.05	0.23	0	1
Former Judge	482	0.11	0.31	0	1
For. Office-Holder Bar. Asso.	482	0.63	0.48	0	1
Former Lawyer	482	0.89	0.31	0	1
After Reform Judge	482	0.14	0.34	0	1
Panel C: District Characteristics					
Variables	Observations	Mean	Std. Dev	Min	Max
No. of shrines per 1000 people	496	0.005	0.005	0	0.016
Military Coup	496	0.669	0.470	0	1
Total Judges in district	496	14.16	5.84	6	30
Area (sq. km)	496	4321.81	3287.76	906	13297
Population	496	2150270	2428460	22454.11	1.14E+07
Density (per sq. km)	496	1094.32	1764.62	8.46	9023.83

Table II: Impact on State Wins

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 x Coup 1999	9.318*** [2.859]	9.693** [3.550]	9.566** [3.450]	9.654** [3.398]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	No	Yes	Yes	Yes
Case Controls	No	No	Yes	Yes
Judge Controls	No	No	No	Yes
Observations	7,439	7,439	7,439	7,439
R-squared	0.045	0.045	0.052	0.055
Mean of dependent variable	0.50	0.50	0.50	0.50

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table III: Mechanism - Impact on Decentralized Districts

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 x Coup 1999 x LG Enforced District	10.98*** [2.863]	10.69** [4.005]	8.086* [4.412]	7.853* [4.456]
Shrine Density 1911 x Coup 1999	-1.603 [2.787]	-1.241 [5.448]	1.297 [5.825]	1.624 [5.916]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	No	Yes	Yes	Yes
Case Controls	No	No	Yes	Yes
Judge Controls	No	No	No	Yes
Observations	7,439	7,439	7,439	7,439
R-squared	0.045	0.045	0.052	0.055
Mean of dependent variable	0.50	0.50	0.50	0.50

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$



Table IV: Impact on State Wins (by type of Constitutional Cases)

	Land Cases <i>State Wins</i>		Human Rights Cases	
Shrine Density 1911 X Coup 1999	13.49*** [3.485]	17.31*** [4.999]	14.45*** [3.718]	13.72*** [4.243]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	No	Yes	No	Yes
Case Controls	No	Yes	No	Yes
Judge Controls	No	Yes	No	Yes
Observations	3,041	3,041	2,323	2,323
R-squared	0.082	0.088	0.051	0.057
Mean of dependent variable	0.47	0.47	0.46	0.46

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table V: Placebo on the Mechanism - Impact on Criminal Cases

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 X Coup 1999	-2.534 [5.340]	0.0267 [6.169]	-1.722 [5.662]	-1.828 [5.514]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	No	Yes	Yes	Yes
Case Controls	No	No	Yes	Yes
Judge Controls	No	No	No	Yes
Observations	2,075	2,075	2,075	2,075
R-squared	0.072	0.072	0.079	0.086
Mean of dependent variable	0.58	0.58	0.58	0.58

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table VI: Mechanism - Impact on State Wins (by Type of Government)

	(1) Disputes with Local Government <i>State Wins</i>	(2) Disputes with Provincial Government	(3) Disputes with Federal Gov- ernment
Shrine Density 1911 x Coups 1999	15.10** [6.045]	10.96 [7.522]	-3.875 [14.97]
District Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
District Controls	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes
Observations	1,780	1,982	1,602
R-squared	0.068	0.101	0.077
Mean of dependent variable	0.47	0.48	0.45

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table VII: Impact on Quality Case Delay and Decisions on Merit

Panel A: Case Delay				
	Case Delay			
	(1) Overall	(2) Land	(3) Human Rights	(4) Criminal
Shrine Density 1911 x Coup 1999	41.06** [15.47]	42.25* [23.21]	77.95*** [15.17]	20.26 [16.72]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	Yes
Observations	7,439	3,041	2,323	2,075
R-squared	0.086	0.144	0.141	0.088
Mean of dependent variable	3.33	3.33	3.28	3.40
Panel B: Decisions on Merit				
	Decisions on Merit			
	(1) Overall	(2) Land	(3) Human Rights	(4) Criminal
Shrine Density 1911 x Coup 1999	-12.28*** [1.485]	-20.63*** [4.169]	-13.35** [4.655]	6.958 [7.809]
District Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
District Controls	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	Yes
Observations	7,439	3,041	2,323	2,075
R-squared	0.086	0.134	0.078	0.164
Mean of dependent variable	0.62	0.60	0.61	0.67

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Table VIII: Robustness - Alternative Reform, Outliers and Dataset

Variables	17th Amendment		Outliers Excluded <i>State Wins</i>		Colonial Gazette Data	
	(1)	(2)	(3)	(4)	(5)	(6)
Shrine Density 1911 x Coups 1999	9.160*** [2.931]	9.585** [3.345]	9.448** [3.319]	9.712** [3.654]	7.315** [3.204]	8.749** [3.764]
Shrine Density 1911 x 17th Amendment	0.436 [2.998]	0.196 [2.742]				
Shrine Density 1911 x Outliers Excluded X Coups 1999			-0.749 [3.288]	-0.649 [3.536]		
Shrine Density 1911 x Colonial Gazette					2.075 [3.239]	0.898 [3.088]
District Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
District Controls	No	Yes	No	Yes	No	Yes
Case Controls	No	Yes	No	Yes	No	Yes
Judge Controls	No	Yes	No	Yes	No	Yes
Observations	7,439	7,439	7,439	7,439	7,439	7,439
R-squared	0.045	0.055	0.045	0.055	0.045	0.055
Mean of dependent variable	0.50	0.50	0.50	0.50	0.50	0.50

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$



## For Online Publication

# Supplement to “Religion, Politics, and Justice: Theory and Evidence from Pakistan”

## A Theory Appendix

### A.1 Proof of Lemma 1

The State is not convicted when:

$$\alpha D_s - p \geq \alpha D_{ns}, \quad (\text{A.1})$$

or equivalently, when:

$$D_{ns} \geq D_s - \frac{p}{\alpha} \quad (\text{A.2})$$

Hence, the probability that the State is not convicted can be expressed as:

$$SW(p) = \int_{D_s=0}^{\phi} \int_{D_{ns}=D_s-p/\alpha}^{\phi} \frac{dD_{ns}}{\phi} \frac{dD_s}{\phi}. \quad (\text{A.3})$$

Developing the preceding expression gives:

$$SW(p) = \frac{1}{2} + \frac{p}{\alpha\phi}. \quad (\text{A.4})$$

By applying the law of large numbers, we deduce that  $SW(p)$  is also the fraction of judicial cases won by the State, when the level of pressure exerted on judges is  $p$ . This concludes the proof of the first point of the Lemma.

The comparative statics of the second point of the Lemma are finally direct from (A.3). This concludes the proof of Lemma 1.

Finally, we can easily show that the uniform assumption for the parameters  $D_{ns}$  and  $D_s$  does not drive the variations of  $SW(p)$  with respect to  $p$ . Indeed, consider a more general case where  $D_{ns}$  is distributed on  $[0, \bar{D}_{ns}]$  with a c.d.f  $F_{ns}(\cdot)$ , and  $D_s$  is distributed over  $[0, D_s]$  with a c.d.f  $F_s(\cdot)$ . In this general case, we can write  $SW(p)$  as:

$$SW(p) = \int_{D_s=0}^{\bar{D}_{ns}} \int_{D_{ns}=D_s-p/\alpha}^{\bar{D}_s} dF_{ns}(D_{ns}) dF_s(D_s), \quad (\text{A.5})$$

so

$$SW(p) = 1 - \int_0^{\bar{D}_s} F_{ns}(D_s - \frac{p}{\alpha}) dF_s(D_s). \quad (\text{A.6})$$

Hence,  $SW(p)$  is still increasing in  $p$ , although not linearly.

## A.2 Proof of Lemma 2

As per (9), a voter chooses to elect the candidate for which he derives the highest value. The stochastic terms  $\epsilon^{v,i}$  and  $\epsilon^i$  follow Gumbel distributions.

From simple mathematics, we deduce that any given realization of  $\epsilon^{v,i} \in \mathbf{R}$  can be expressed as:

$$\epsilon^{v,i} = \ln(x^{v,i}), \quad (\text{A.7})$$

with  $x^{v,i} > 0$  drawn from a Fréchet distribution with a cumulative distribution  $H(\cdot)$  such that:

$$H(x) = e^{-1/x}. \quad (\text{A.8})$$

Therefore, the utility of voter  $v$  from electing candidate  $i$  can be rewritten as:

$$u(v, i) = \ln(\eta\theta^i + q^i - \mu p^i) + \ln(x^i) + \ln(x^{v,i}), \quad (\text{A.9})$$

with  $x^i$  a random variable drawn from a Fréchet distribution, and such that  $x^i = \ln(\epsilon^i)$ . Similarly,  $x^{v,i}$  a random variable drawn from a Fréchet distribution, and is such that  $x^{v,i} = \ln(\epsilon^{v,i})$ . Therefore,

$$u(v, i) = \ln(x^{v,i}[\eta\theta^i + q^i - \mu p^i]). \quad (\text{A.10})$$

Given that the log is an increasing function, the probability that voter  $v$  elects candidate  $i$  can be expressed as:

$$\begin{aligned} \Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \\ \Pr(x^{v,i}[\eta\theta^i + q^i] > x^{v,j}[\eta\theta^j + q^j] \text{ for any } j \neq i), \end{aligned} \quad (\text{A.11})$$

so

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \Pr(x^{v,i} \frac{x^i(\eta\theta^i + q^i - \mu p^i)}{x^j(\eta\theta^j + q^j - \mu p^j)} > x^{v,j} \text{ for any } j \neq i), \quad (\text{A.12})$$

Following [Seror and Verdier \(2020\)](#), then, we can develop the previous probability with the Fréchet distributions:

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \int_{x^{v,i}=0}^{\infty} \prod_{j \neq i} H(x^{v,i} \frac{x^i(\eta\theta^i + q^i\mu p^i)}{x^j(\eta\theta^j + q^j\mu p^j)}) dH(x^{v,i}), \quad (\text{A.13})$$

so

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \int_{x^{v,i}=0}^{\infty} \prod_{j \neq i} e^{-[x^{v,i} \frac{x^i(\eta\theta^i + q^i\mu p^i)}{x^j(\eta\theta^j + q^j\mu p^j)}]^{-1}} d[e^{-x^{v,i} - 1}]. \quad (\text{A.14})$$

This expression greatly simplifies, as the product becomes a sum in the exponent of the exponential:

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \int_{x^{v,i}=0}^{\infty} e^{-\frac{1}{x^{v,i}} \frac{\sum_{j \neq i} x^j(\eta\theta^j + q^j\mu p^j)}{x^i(\eta\theta^i + q^i\mu p^i)}} d[e^{\frac{1}{x^{v,i}}}], \quad (\text{A.15})$$

so

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \int_{x^{v,i}=0}^{\infty} \frac{1}{x^{v,i}{}^2} e^{-\frac{1}{x^{v,i}} \frac{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j\mu p^j)}{x^i(\eta\theta^i + q^i\mu p^i)}} dx^{v,i}, \quad (\text{A.16})$$

Therefore,

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \frac{x^i(\eta\theta^i + q^i\mu p^i)}{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j\mu p^j)} \int_{x^{v,i}=0}^{\infty} d[e^{\frac{1}{x^{v,i}}}], \quad (\text{A.17})$$

which finally rewrites:

$$\Pr(u(i, v) > u(j, v) \text{ for any } j \neq i) = \frac{x^i(\eta\theta^i + q^i\mu p^i)}{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j\mu p^j)}. \quad (\text{A.18})$$

Applying the law of large numbers, we deduce that the probability that a voter chooses candidate  $i$  is also the vote share of candidate  $i$ .

Therefore, the vote share of candidate  $i$  is equal to:

$$\frac{x^i(\eta\theta^i + q^i\mu p^i)}{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j\mu p^j)}. \quad (\text{A.19})$$



The probability that candidate  $i$  wins the election is denoted  $\pi(p^i, p^{-i})$ , and can then be expressed as:

$$\pi(p^i, p^{-i}) = \Pr\left(\frac{x^i(\eta\theta^i + q^i - \mu p^i)}{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j - \mu p^j)} > \frac{x^k(\eta\theta^k + q^k - \mu p^k)}{\sum_{j \in \mathcal{N}_d} x^j(\eta\theta^j + q^j - \mu p^j)} \text{ for any } k \neq i\right). \quad (\text{A.20})$$

Simplifying the denominators in the above expression, we find that:

$$\pi(p^i, p^{-i}) = \Pr\left(\frac{x^i(\eta\theta^i + q^i - \mu p^i)}{\eta\theta^k + q^k - \mu p^k} > x^k\right). \quad (\text{A.21})$$

Since each  $x^j$ ,  $j \in \mathcal{N}_d$  is drawn from a Fréchet distribution of density  $H(x) = e^{-1/x}$ , following the steps of the previous computations, we find that:

$$\pi(p^i, p^{-i}) = \frac{\eta\theta^i + q^i - \mu p^i}{\sum_{j \in \mathcal{N}_d} \eta\theta^j + q^j - \mu p^j}. \quad (\text{A.22})$$

This establishes the first point of Lemma 2.

The comparative statics in the second point of the Lemma are direct from the expression of  $\pi(p^i, p^{-i})$ .

### A.3 Proof of Proposition 1

In order to prove the proposition, we first need to establish that there exists a unique equilibrium. For each district, we can indeed determine the optimal number of candidates with a high legitimacy  $N_d^h$ , with a low legitimacy  $N_d^l$ , and their optimal punishments  $p^{h*}$ , and  $p^{l*}$ .

First, we demonstrate that when the number of candidates is fixed, the second-order condition associated with the maximization problem that any candidate faces is concave, as the second-order condition is verified. This, in turn, establishes the uniqueness of the Nash equilibrium played by the candidates. Then, we study the optimal entry decisions.

Therefore, the first-order condition associated with the problem of a politician  $i$  given in (12) can be rewritten as:

$$-\gamma\phi'(p^i) + \frac{\partial\pi(p^i, p^{-i})}{\partial p^i} \left\{ k \frac{p^i}{\phi\alpha} + \chi \right\} + \pi(p^i, p^{-i}) \frac{k}{\phi\alpha} = 0. \quad (\text{A.23})$$

The second-order condition is then:

$$\frac{\partial^2 W}{\partial p^{i^2}} = -\gamma\phi''(p^i) + \frac{\partial^2 \pi(p^i, p^{-i})}{\partial p^{i^2}} \left\{ k \frac{p}{\phi\alpha} + \chi \right\} + \frac{\partial \pi(p^i, p^{-i})}{\partial p^i} \frac{k}{\phi\alpha}. \quad (\text{A.24})$$

$$\frac{\partial \pi(p^i, p^{-i})}{\partial p^i} = -\mu \frac{\sum_{j \neq i} \eta \theta_j + q_j}{(\sum_j \eta \theta_j + q_j)^2} < 0, \quad (\text{A.25})$$

and

$$\frac{\partial^2 \pi(p^i, p^{-i})}{\partial p^{i^2}} = -2\mu^2 \frac{\sum_{j \neq i} \eta \theta_j + q_j}{(\sum_j \eta \theta_j + q_j)^3} < 0, \quad (\text{A.26})$$

so

$$\frac{\partial^2 W}{\partial p^i} < 0. \quad (\text{A.27})$$

The second-order condition is then verified.

Furthermore,  $\frac{\partial \pi(p^{i*}, p^{-i*})}{\partial N_d^k} < 0$ , for  $k \in \{h, l\}$ . More competition from either high or legitimacy candidates decreases the probability that any single candidate wins the election.

By applying the envelop theorem, then, it is direct that  $W(p^{i*}, p^{-i*})$  decreases with both  $N_d^h$  and  $N_d^l$ . It follows that the function  $N_d^h \rightarrow W^i(p^{i*}, p^{-i*})$  is decreasing, for  $i \in \{L, H\}$ . In words, the utility of any candidate is decreasing with the number of high or low legitimacy candidates. In particular, the utility  $W^i(p^{i*}, p^{-i*})$  of a candidate  $i$  with high legitimacy decreases with the number of competitors he has that also have a high legitimacy  $N_d^h - 1$ , for a given value of  $N_d^l$ . The function  $N_d^h \rightarrow W(p^{i*}, p^{-i*})$  is represented by the black curve in Figure A.1. Similarly, the utility of a candidate  $j$  with low legitimacy decreases with the number of competitors that  $j$  has that have a low legitimacy  $N_d^l - 1$ , for a given value of  $N_d^h$ . The function  $N_d^l \rightarrow W(p^{j*}, p^{-j*})$  is represented by the blue curve in Figure A.1.

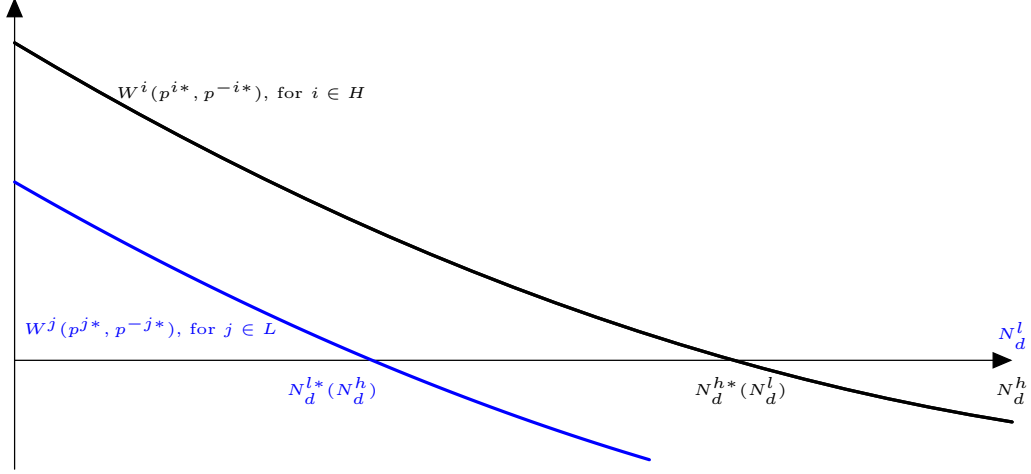
Hence, we deduce that the equation

$$W^i(p^{i*}, p^{-i*}) = 0 \quad (\text{A.28})$$

for  $i \in H$  defines a locus  $N^{h*}(N_d^l)$ . Furthermore,  $N^{h*}(\cdot)$  is decreasing with  $N_d^l$ , as the utility of high legitimacy candidate is negatively affected by more competition from low legitimacy candidates.

Similarly, the equation  $W^j(p^{j*}, p^{-j*}) = 0$  for  $j \in L$  defines a locus  $N^{l*}(N_d^h)$ . The function  $N^{l*}(\cdot)$  is decreasing with  $N_d^h$ , as the utility of low legitimacy candidates is negatively affected by more competition from high legitimacy candidates.

Figure A.1: Determinations of the loci  $N_d^{l*}(N_d^h)$  and  $N_d^{h*}(N_d^l)$ .



Since both the loci  $N_d^l \rightarrow N^{h*}(N_d^l)$  and  $N_d^h \rightarrow N^{l*}(N_d^h)$  are decreasing, they necessarily intersect once, as represented on Figure 2. Hence, there is a unique equilibrium, where candidates endogenously choose to run for the election.

The second point of the proposition follows from the observation that candidates with a higher legitimacy derives – for given values of  $N_d^h$  and  $N_d^l$  – higher utility levels. Hence, they have a higher propensity to run for the election.

Finally, higher legitimacy candidates exert more pressure on the judiciary than their peers with a lower legitimacy. This is because for given values of  $N_d^h$  and  $N_d^l$ , higher legitimacy candidates have a higher marginal benefit at punishing the judges, and a lower marginal cost.

## A.4 Proof of Prediction 1

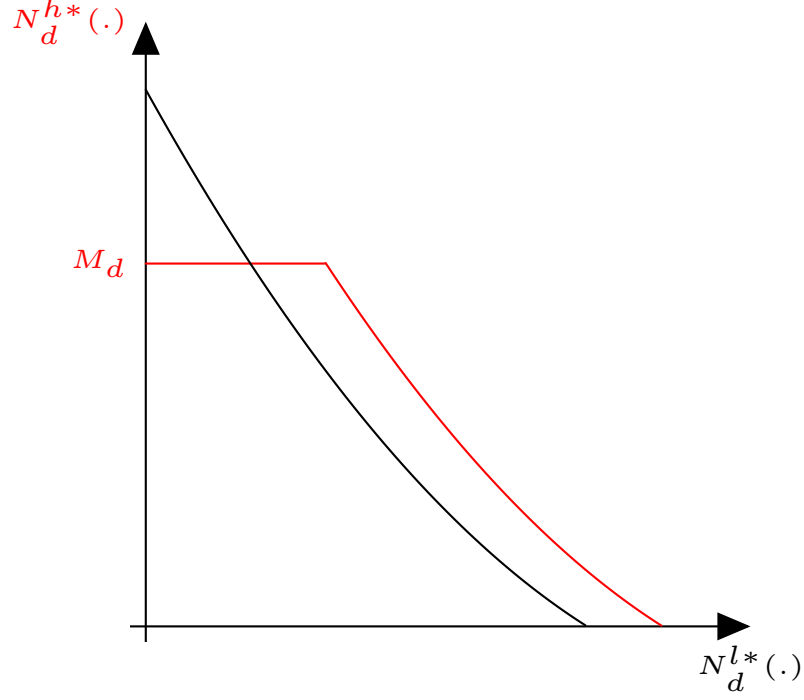
The expected level of threats on judges exerted in district  $d \in \mathcal{D}$ , that we denote  $\mathbb{E}(p_d^*)$ , can be expressed as:

$$\mathbb{E}(p_d^*) = N_d^{h*} \pi(p_d^{h*}, p_d^{-h*}) p_d^{h*} + N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) p_d^{l*}, \quad (\text{A.29})$$

with  $N_d^{h*}$  and  $N_d^{l*}$  the number of candidates with a high and a low legitimacy, respectively.

When  $N_d^{h*} < M_d$ , the number of shrines have no effect on the equilibrium. Hence, we can disregard this case, and focus on the case where the constraint is binding, and

Figure A.2: Equilibrium number of entrants with high and low legitimacy.



$N_d^{h*} = M_d$ . In this case, the aggregate vote share of the candidates with high legitimacy is  $M_d \pi(p_d^{h*}, p_d^{-h*})$ , and

$$\frac{\partial M_d \pi(p_d^{h*}, p_d^{-h*})}{\partial M_d} = \pi(p_d^{h*}, p_d^{-h*}) + M_d \frac{\partial \pi(p_d^{h*}, p_d^{-h*})}{\partial M_d} = \pi(p_d^{h*}, p_d^{-h*}) (1 - M_d \pi(p_d^{h*}, p_d^{-h*})) > 0. \quad (\text{A.30})$$

Hence, we obtain that:

$$\begin{aligned} \frac{\partial \mathbb{E}(p_d^e)}{\partial M_d} &= \frac{\partial [M_d \pi(p_d^{h*}, p_d^{-h*})]}{\partial M_d} (p_d^{h*} - p_d^{l*}) + \\ &\quad \{ M_d \pi(p_d^{h*}, p_d^{-h*}) \frac{\partial p_d^{h*}}{\partial M_d} + N_d^{l*} \pi(p_d^{l*}, p_d^{-l*}) \frac{\partial p_d^{l*}}{\partial M_d} \}. \quad (\text{A.31}) \end{aligned}$$

Since  $p_d^{h*} - p_d^{l*} > 0$  from Proposition 1, the first line of the RHS of (A.31) is positive.

Since both  $\frac{\partial p^{h*}}{\partial M_d}$  and  $\frac{\partial p^{l*}}{\partial M_d}$  are strictly negative, the second line of the RHS of (A.31) is negative. Overall, then, the effect of a higher number of shrines on the threats exerted on the Judiciary is ambiguous.

**Sufficient condition on  $\gamma$ :** When  $\gamma \rightarrow 0$ , then, from (11), a politician enters the election whenever his expected probability of being elected is superior to zero. Hence, candidates massively run, and their likelihood of being chosen vanishes to zero.

We use the following simpler notations on the rest of the proof:  $\pi^{i*} = \pi(p^{i*}, p^{-i*})$ ,  $z^{i*} = \eta\theta^i + q^i - \mu p^{i*}$ ,  $Z = \sum_{j \in \mathcal{N}_d} z^{j*}$ , and  $\tilde{Z}^{i*} = \sum_{j \neq i} z^{j*}$ .

By differentiating the first-order condition associated with the optimal choice of a candidate, we find that:

$$\frac{\partial p^{i*}}{\partial M_d} = -\pi^{h*} \frac{\gamma \phi'(p^{i*} + \frac{\mu \pi^{i*2}}{z^{i*}} (\frac{kp^{i*}}{\phi\alpha} + \chi))}{\gamma \phi''(p^{i*}) + 2\mu [\frac{kp^{i*}}{\phi\alpha} + \chi] \frac{\tilde{Z}^{i*}}{Z^3} + \frac{k\mu}{\phi\alpha} [\frac{kp^{i*}}{\phi\alpha} + \chi] \frac{\tilde{Z}^{i*}}{Z^2}} \quad (\text{A.32})$$

Assuming that

$$\frac{\partial p^{i*}}{\partial M_d} = \max(\frac{\partial p^{h*}}{\partial M_d}, \frac{\partial p^{l*}}{\partial M_d}), \quad (\text{A.33})$$

we find that

$$\frac{\partial \mathbb{E}(p_d^e)}{\partial M_d} > 0 \quad (\text{A.34})$$

when

$$(1 - M_d \pi^{h*})(p^{h*} - p^{l*}) > \frac{\gamma \phi'(p^{i*} + \frac{\mu \pi^{i*2}}{z^{i*}} (\frac{kp^{i*}}{\phi\alpha} + \chi))}{\gamma \phi''(p^{i*}) + 2\mu [\frac{kp^{i*}}{\phi\alpha} + \chi] \frac{\tilde{Z}^{i*}}{Z^3} + \frac{k\mu}{\phi\alpha} [\frac{kp^{i*}}{\phi\alpha} + \chi] \frac{\tilde{Z}^{i*}}{Z^2}}. \quad (\text{A.35})$$

Since  $\pi^{i*} \rightarrow 0$  but  $p^{h*} - p^{l*} > 0$  when  $\gamma \rightarrow 0$ , the above inequality is necessarily verified when  $\gamma \rightarrow 0$ .

## A.5 Proof of Prediction 4

The utility of a judge, in equilibrium, can be written as follows:

$$\mathbb{E} V_j^d(c) = w + \int_{D_s(c)=0}^{\phi} \int_{D_{ns}(c)-\mathbb{E} p_d^*/\alpha \geq D_s(c)}^{\phi} \{\alpha D_{ns}(c) - \mathbb{E} p_d^*\} \frac{dD_{ns}(c)}{\phi} \frac{dD_s(c)}{\phi} + \int_{D_{ns}(c)=0}^{\phi} \int_{D_{ns}(c)-\mathbb{E} p_d^*/\alpha \leq D_s(c)}^{\phi} \alpha D_s(c) \frac{dD_{ns}(c)}{\phi} \frac{dD_s(c)}{\phi}, \quad (\text{A.36})$$

for  $\mathbb{E} p_d^*$  the pressure exerted by the elected politician  $i$  in district  $d \in \mathcal{D}$ . Hence, changing the notations,  $V_j^d$  can be rewritten as:

$$\begin{aligned} V_j^d = w + \int_{D_s(c)=0}^{\phi} \frac{\alpha}{2\phi^2} \{\phi^2 - (D_s(c) + \mathbb{E} p_d^*/\alpha)^2\} dD_s(c) \\ - \int_{D_{ns}(c)=0}^{\phi} \frac{1}{\phi^2} \{\mathbb{E} p_d^*(\phi - D_s(c) - \mathbb{E} p_d^*/\alpha)\} dD_s(c) \\ + \int_{D_{ns}(c)=0}^{\phi} \frac{\alpha}{2\phi^2} \{\phi^2 - (D_{ns}(c) - \mathbb{E} p_d^*/\alpha)^2\} D_{ns}(c). \end{aligned} \quad (\text{A.37})$$

We deduce that:

$$V_j^d = w + \alpha\phi - \frac{\alpha}{\phi^2} \int_0^{\phi} \{x^2 + \mathbb{E} p_d^{*2}/\alpha^2\} dx - \frac{1}{\phi^2} \int_0^{\phi} \{\mathbb{E} p_d^*(\phi - x - \mathbb{E} p_d^*/\alpha)\} dx, \quad (\text{A.38})$$

from which it is direct that:

$$V_j^d = w + \frac{2}{3}\alpha\phi - \frac{3}{2}\mathbb{E} p_d^*. \quad (\text{A.39})$$

From this expression, since  $\mathbb{E} p_d^*$  increases with  $M^d$ , from Prediction 1, we deduce that the quality of judicial decisions tend to be lower in districts where there are more shrines. This concludes the proof of Prediction 4.

## A.6 Proof of Proposition 5

**Optimization problem of the militaries in a centralized state:** In a centralized state, the militaries' utility is given by:

$$U_m^{ce} = q(r^{ce} + k\{SW(p^{ce}) - SW(0)\})[r^{ce} + k\{SW(p^{ce}) - SW(0)\}], \quad (\text{A.40})$$

which they maximize, by choosing a level of punishment on judges  $p^{ce}$ , and the rents  $r^{ce}$  they extract, independently from the judiciary.

From (A.40), in a centralized state, it does not matter for the rulers how rents are extracted. Rulers only care about maximizing the aggregate rents  $r^{ce} + k\{SW(p^{ce}) - SW(0)\}$  they extract from the citizenry. Hence, the first-order condition associated with the maximization problem of the militaries in a centralized state is:

$$q'(R^{ce})R^{ce} + q(R^{ce}) = 0. \quad (\text{A.41})$$

The second-order condition is verified, given the assumptions made on the function  $q(\cdot)$ . It follows that the indirect utility of the militaries, that we denote  $u_m^{ce}$  is independent from district-level variations in the number of shrines.

**Optimization of the militaries in a decentralized state:** In a decentralized state, the militaries are not hold accountable – by the population – of the rents extracted by politicians at the district level. The rents extracted at the local level, however, hurt the perceived quality of the local-level candidates, who may, then, refrain from extracting too much, given their perceived legitimacy from holding local offices.

The utility of the militaries can be expressed as:

$$U_m^{de} = q(r^{de})[r^{ce} + k\alpha \sum_{d \in \mathcal{D}} \frac{1}{D} \{SW(\mathbb{E} p_d^*) - SW(0)\}], \quad (\text{A.42})$$

which they maximize by only choosing the rents  $r^{de}$  they extract, independently from the judiciary. Indeed, political pressure on the judiciary are decided at the local level by elected politicians, not the militaries. Hence, higher levels of pressure on judges do not affect the probability that the militaries are ousted.

The first-order condition associated with the maximization problem of the militaries is:

$$q'(r^{de})[r^{ce} + k\alpha \sum_{d \in \mathcal{D}} \frac{1}{D} \{SW(\mathbb{E} p_d^*) - SW(0)\}] + q(r^{de}) = 0 \quad (\text{A.43})$$

Again, the second-order condition is verified, given the assumption made on the function  $q(\cdot)$ . We deduce that the indirect utility of the militaries,  $u_m^{de}$ , is an increasing function of  $SW(\mathbb{E} p_d^*)$ .

Since

$$SW(\mathbb{E} p_d^*) = \frac{\mathbb{E} p_d^*}{\phi\alpha} \quad (\text{A.44})$$

and  $\mathbb{E} p_d^*$  is increasing with  $\theta^h$ , we deduce that  $u_m^{de}$  increases with  $\theta^h$ .

Hence, if  $\theta^h$  is sufficiently high, then the militaries decentralize the State, as there exists a unique threshold  $\bar{\theta}^h$  such that:

$$\begin{cases} u_m^{de} > u_m^{ce} & \text{if } \theta^h > \bar{\theta}^h, \text{ and} \\ u_m^{de} \leq u_m^{ce} & \text{otherwise.} \end{cases} \quad (\text{A.45})$$

We have demonstrated that if  $\theta^h$  is sufficiently high, then the militaries necessarily decentralize the State, at it strictly increase their utility.

Finally, this result holds only if  $\lambda > 0$ . In the case where  $\lambda = 0$ , then the rulers have no incentive to decentralize the regime. There is no point in decentralizing, since the militaries cannot take advantage of other people being corrupted and redistribution them resources. When  $\lambda = 0$ , then, the militaries will set their optimal extraction level  $r^{de*}$  to a level such that they extract as much resources as they did in a centralized regime.

Finally, relative to the second point of Prediction 5, for  $\theta^h$  sufficiently high, then

$$\sum_{d \in \mathcal{D}} \frac{1}{D} SW(\mathbb{E} p_d^*) = \sum_{d \in \mathcal{D}} \frac{1}{D} \frac{\mathbb{E} p_d^*}{\phi\alpha} > \frac{p^{ce,*}}{\phi\alpha} \quad (\text{A.46})$$

is necessarily verified. This concludes the proof of Prediction 5.

## A.7 Extension with Positive filing costs

### The problem of the litigant:

In this section, we extend the model presented in the main text, in order to account for filing costs. Indeed, filing costs affect the incentive of potential litigants to file a case, and hence, it affect the types of cases that are adjudicated in Court.

In order to account for filing costs, we assume that litigants differ in the cost they face for filing judicial cases. Let  $C_a$  be the cost, for litigant  $a$ , at filing a case. We assume that  $C_a$  is the commonly known realization of a random variable, drawn from a distribution  $F(\cdot)$ , which takes support in the positive real line.



Hence, in district  $d \in \mathcal{D}$ , a litigant files a case when his expected benefit at doing so exceeds  $C_a$ . More formally, a litigant files a case when:

$$(1 - SW(p_d))k - C_a \geq 0. \quad (\text{A.47})$$

We deduce that the fraction  $FC_d$  of cases that are filed in district  $d$  can be written as:

$$FC_d = 1 - F\left(\frac{k}{2} + \frac{p_d^*}{\phi\alpha}\right). \quad (\text{A.48})$$

Hence, the threat exerted by politicians on judges reduce the propensity of potential litigants to file cases. We can introduce a variable  $MC_d > 0$ , the fraction of cases that should have been filed, but that have not been filed, given the threats exerted by politician on judges:

$$MC_d = F\left(\frac{k}{2} + \frac{p_d^*}{\phi\alpha}\right) - F\left(\frac{k}{2}\right). \quad (\text{A.49})$$

## The problem of the State:

The missing cases represents lack of opportunities for extraction from the politicians. Hence, the problem of a politician  $i$  can be rewritten as:

$$W(p^i, p^{-i}) = -\gamma\phi(p^i) + \pi(p^i, p^{-i})(FC_d(p^i))\{k(SW(p^i) - SW(0)) + \chi\}, \quad (\text{A.50})$$

which he maximizes by choosing  $p^i$ , given that all the challengers are expected to the exactly the same. Hence, after writing the first-order conditions, we find that politicians will exert less pressure on judges, because they expect political threats to decrease not only their probability of being elected, but also the rents they can extract from litigants, as litigants file less cases, given that they expect to win less often. Still, the threats exerted by high-legitimacy candidates will be above that exerted by low-legitimacy candidates.

Except the previous effect, the inclusion of filing costs in the model does not change the voters and the judges' optimization problems. Hence, the main results are also unaffected by the inclusion of filing costs. Accounting for filing costs, then, only reduces the overall number of candidates running for elections, since it reduces the incentive of candidates to threat judges.

## B Empirical Appendix

### B.1 Additional Definitions and Sources

**State Wins** = Average State Victories in a district for a given year. The law firms coded this variable based on the following rubric: it takes the value of 1 in case of a state victory and zero in case of a state loss. This is obtained from the text of judgement order.

**Shrine Density** = This is number of shrines per 1000 people in British Colonial Gazettes of 1911 and number of Shrines in Auqaf Department records in 1952. The variable is constructed from the following simple operation:  $\text{Shrine Density} = (\text{Number of Shrines in the Judicial District}) / (\text{Total Population in the Judicial District}) \times 1000$ .

**Case Lag** = It is the difference between case decision year and case filing year. This is obtained from the text of judgement order.

**Merit Case** = It is a dummy variable that takes the value of 1 if the case is decided on based on evidence rather than technical or procedural grounds (Pound, 1963). This is based on the assessments of the law firms based on reading the text of the judgement order.

**Constitutional Case** = It is a dummy variable that takes the value of 1 if it is a constitutional case and zero otherwise. In the main specification is averaged across-district and over time. This is indicated on the text of the judgement order. **Land Case** = It is a subset of constitutional cases, it is a dummy variable that takes the value of 1 if it is a case involving land ownership or expropriation dispute with The State and 0 otherwise. Often it is Ministry of Defense, housing authority or most commonly a development agency, which is authorized to resolve disputes regarding land ownership (Defense Ministry, Defense Housing Authority, Lahore Development Authority (LDA), Karachi Development Authority (KDA), Peshawar Development Authority (PDA), Capital Development Authority (CDA)).

**Human Rights Case** = It is a subset of constitutional cases, it is a dummy variable that takes the value of 1 if it does not involve a case involving land ownership or expropriation dispute with The State and 0 otherwise. These cases are marked as writ petitions in the text of judgment order.

**Criminal Case** = It is a dummy variable that takes the value of 1 if it is a criminal case and zero otherwise. In the main specification is averaged across-district and over time. This is indicated on the text of the judgement order.

**Number of Lawyers** = It is based on a count variable documenting the number of lawyers arguing in the particular case. This is also indicated on the text of the judgement order.

**Number of Judges** = It is based on a count variable documenting the number of judges adjudicating upon the particular case. This is also indicated on the text of the judgement order.

**Bench Chief Justice** = It is dummy variable that takes the value of 1 if the chief justice or senior most judge was adjudicating in the case and zero otherwise. In the main specification is averaged across-district and over time.

**Number of Pages of Judgment Orders** = It is a count variable documenting number of pages of the judgement order issues in the particular case. This is also indicated on the text of the judgement order.

**Age at appointment** = It is the difference between date of birth and age at appointment. This data is obtained from Judicial Administrative Data Records at the High Court Registrar Offices.

**Gender** = It is a dummy variable that takes the value of 1 if it is a male judge and 0 if it is a female judge. It is coded in two ways: 1) Manually, where the author checks every judge name, the dummy variable takes the value of 1 if it is male and zero if female. 2) Automatically, where the author asks Stata to read the string starting with Justice Miss and Justice Mrs. as zero and the string started by Justice Mr. as one. The two methods yield identical number of males and female justices.

**Promoted to SC** = It is a dummy variable for the judge who was elevated to the supreme court bench and zero otherwise. This is obtained from judicial administrative records of the Supreme Court Registrar Office.

**Former Lawyer** = It is a dummy variable for the judge who was formerly a lawyer before being appointed as a justice of the high court. Data for this obtained through a combination of biographical information contained in annual reports, bar council records and judicial administrative data.

**Former Office Holder Bar Association** = It is a dummy variable for the judge who was formerly an office holder of the lawyers bar association (before being appointed as a justice of the high court). Data for this obtained through a combination of biographical information contained in annual reports, bar council records and judicial administrative data.

**Former Judge** = It is a dummy variable for the judge who was formerly a lower court (civil or session court) judge. Data for this obtained through a combination of biographical information contained in annual reports and judicial administrative data.

**Total Judges** = It is a district-time count variable that tells us the number of judges at a district high court in a given time period. Data for this obtained through a combination of information contained in annual reports and judicial administrative data.

**Area** = It is the area (in square kilometres) of the district where the high court is located. This is obtained from a linear interpolation of 1998 and 2017 census of Pakistan.

**Population** = It is the population of the district where the high court is located. This is obtained from a linear interpolation of 1998 and 2017 census of Pakistan.

**Density** = It is the per square kilometre population density of the district where the high court is located (area/population). This is obtained from a linear interpolation of 1998 and 2017 census of Pakistan.

## B.2 Data Appendix: Additional Information and Data Collection

### B.2.1 History and Structure of Courts in Pakistan

In this subsection we discuss background and structure of courts in Pakistan. The Indian High Courts Act of 1861 authorized the Crown to create the high courts in the Indian colony. These courts served as precursors to the modern-day high courts of both India and Pakistan. With the independence of India and Pakistan from British colonial rule in 1947, gradual changes were made in the legal institutions in both countries, but both retained the overarching institutional structure such as the common law jurisprudence.

Pakistan's judiciary is composed of a three-tier hierarchical structure. The lowest courts are the civil and session courts where the civil courts hear civil cases and session courts adjudicate upon the criminal cases. These courts are located in the provincial capitals and have jurisdictions dictated by domicile of the litigating parties. Decisions in civil and session courts can be challenged in the high courts of Pakistan. If the government expropriates land or violates any fundamental right, the high court is the first (and in most cases) the only platform for the citizens and firms for remediation. Although, in theory there are only four provincial high courts in Pakistan, but the benches of each provincial high court are spread within the 4 provinces of Pakistan (see Figure 1). This is in the form of 16 district high court benches (about 4 district benches in each of the 4 provinces). Most important for our paper is the fact that in the high court, one can also file a case against the government. This takes the form of a constitutional petitions against The State or Criminal Petition against the State. Constitutional cases involving The State as a party involve cases filed against the federal government, provincial governments and local governments or any organ of the state that yields executive authority (such as the office of the Prime Minister). Finally, there is the final appellate court, the Supreme Court of Pakistan, located in the federal capital of Islamabad. It typically hears appeals on technical ground for the criminal and constitutional cases from the high courts. The Supreme Court can have at most 16 judges which greatly limits the number and scope of cases it can hear. Therefore, only a small fraction of cases ends up being heard by the Supreme Court ([Arshad \(2018\)](#)).

## B.2.2 Case Data Sources and Construction

The case characteristics is obtained from central repository of cases used by lawyers to prepare their cases. This is available online at Pakistan Law Site (<https://www.pakistanlawsite.com/>). This website is the Central Library used by lawyers to prepare their cases (since Pakistan is a common law system where case precedent is crucial) as well as paralegals and students studying for their law exams. Access for this is password protected where permission to use the website and cases is gained through a law firm. Two teams of paralegals supervised by a senior lawyer each record key information related to the cases in the texts of the judgement order available at the website. Table B.1 presents averages for case characteristics coded by the two teams as well as correlation coefficient between them. Since, the Pakistan Law Site library contains the whole universe of (undigitized) cases decided from 1950 to 2017, we had to choose a sample period given our budget and research question. We randomly sample all the available cases for every year depending on the total universe of cases decided in that year from 1986 to 2016 inclusive. As number of cases decided in a year gradually rises, so does the fraction of sampled cases in our sample. Figure B.5 presents this information as plot of total cases sampled with total available cases.

## B.2.3 Shrine Data Sources and Construction

The key source for the shrine data is the British Colonial Gazettes. The publication in the gazettes was a legal necessity that allowed documents to come into force and enter the public realm. Essentially, these were official legal and public bulletins of the British Government for its Indian Colony. Information on the shrines was published a regular section on fairs and festivals. This section contained the names and associated festivals of all shrines in the district. These shrines are counted for each district and forms the basis for the shrine dataset. Likewise, since British directly ruled in two of the provinces in present day Pakistan (Punjab and Sindh), this source only contains data on these provinces. Therefore, this Gazette data for shrines is complemented by data from Auqaf Department in the Ministry of Religious Affairs (Auqaf department is responsible for overseeing religious charities and donations within the ministry of religious affairs). Auqaf Department records all shrines with their location, which we use to construct the shrine dataset. Specifically, Auqaf department overseen by the provincial government is responsible for administration of Waqf properties (literally, devote indefinitely) that is an inalienable charitable trust (Bazzi et al, 2018, p. 1). These properties include shrines, mosques and other religious

institutions that such as Madrassas (religious seminaries). Important thing to note is that the Waqf properties cannot be bought or sold where in the case of shrines, the shrine family can hold it infinitum. We combine both these data sources to obtain shrine density for every judicial district of Pakistan.<sup>67</sup>

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<sup>67</sup>For further information on the shrine dataset, see [Malik and Mirza \(2019\)](#).

## B.3 Additional Tables and Figures

Table B.1: Outcome Variables and Case Characteristics Comparison of Team 1 and Team 2

Variables	Team 1	Team 2	Difference	Correlation ( $\rho$ )
State Wins	0.50	0.56	-0.06	0.89
Case Delay	3.33	3.30	-0.03	0.99
Merit	0.62	0.67	0.05	0.88
Constitutional	0.72	0.70	-0.01	0.95
Land Cases	0.41	0.38	0.03	0.94
HR Cases	0.31	0.33	0.02	0.96
Criminal Cases	0.28	0.29	-0.01	0.93
# of Lawyers	4.04	4.09	-0.05	0.94
# of Judges	1.81	1.83	-0.02	0.87
CJ in Bench	0.06	0.08	-0.02	0.83
Pg. of Judgement	8.88	8.71	0.03	0.97

Note: The table compares the outcome variables and case characteristics for the two teams of coders for the same 7439 cases used in the analysis. Team 1 is the data used in the analysis. Means, their difference, and correlation coefficient between the two groups are presented.

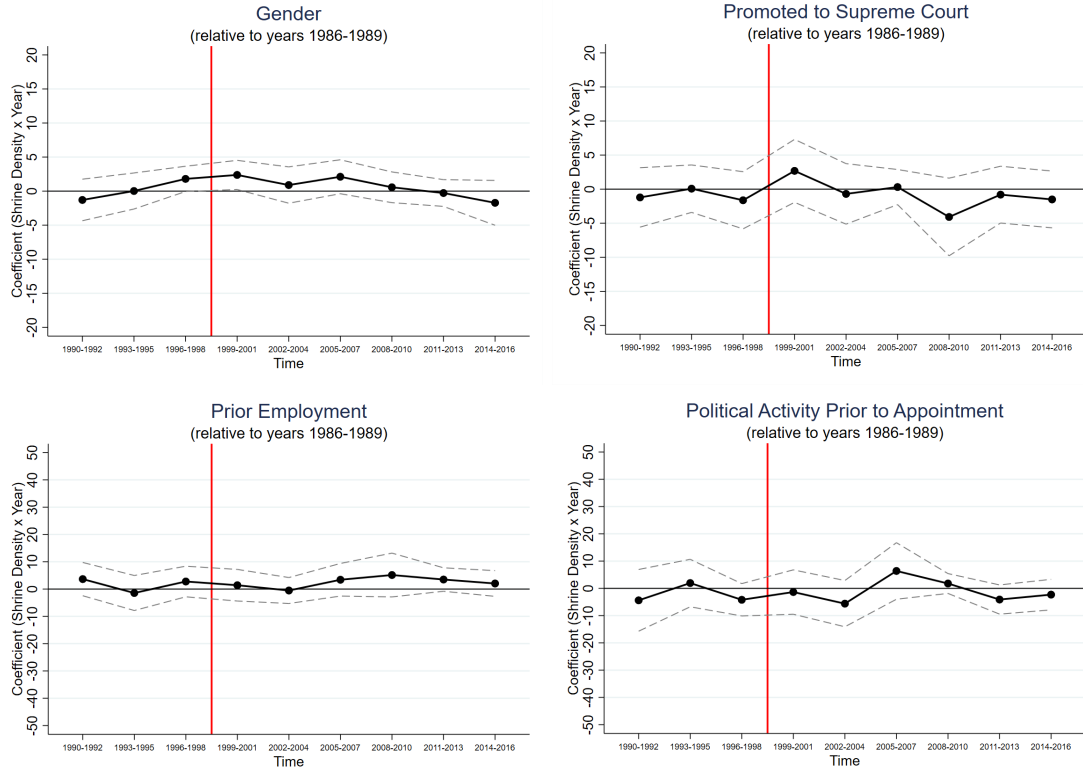


Table B.2: Case Lag and Merit - Robustness - Alternative Reform, Outliers and Dataset

Variables	17th Amendment		Outliers Excluded		Colonial Gazette Data	
	<i>Case Delay</i>	<i>Merit</i>	<i>Case Delay</i>	<i>Merit</i>	<i>Case Delay</i>	<i>Merit</i>
Shrine Density 1911 x Coups 1999	49.42** [20.49]	-11.49*** [2.593]	57.12*** [17.30]	-10.56*** [1.383]	73.93* [39.31]	-10.72** [4.510]
Shrine Density 1911 x 17th Amendment	20.51 [32.46]	5.246* [2.951]				
Shrine Density 1911 x Outliers Excluded X Coups 1999			-1.496 [24.64]	5.646 [4.702]		
Shrine Density 1911 x Colonial Gazette					-17.67 [26.50]	1.173 [4.798]
District Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
District Controls	Yes	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	Yes	Yes	Yes	Yes	Yes
Judge Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,439	7,439	7,439	7,439	7,439	7,439
R-squared	0.082	0.080	0.082	0.080	0.082	0.079

Robust standard errors in brackets (clustered at district level) \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

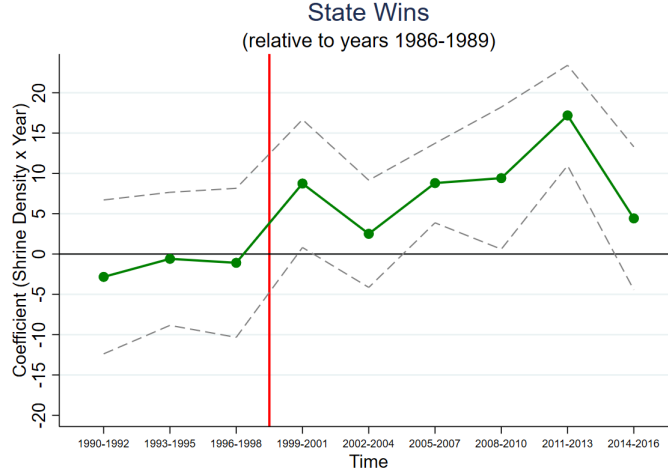
Figure B.1: Additional Potentially Confounding Interactions with the Coup



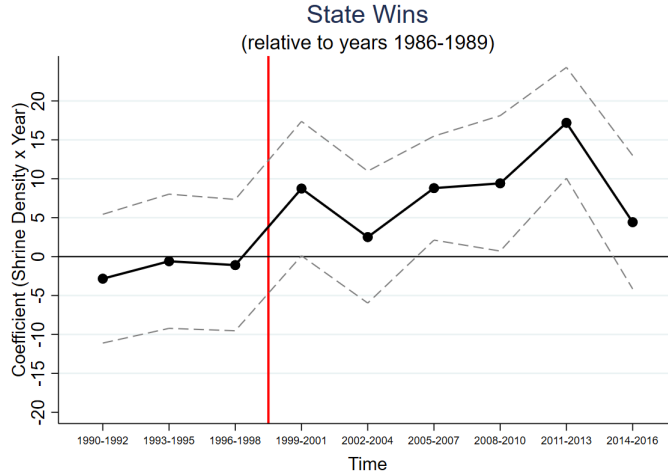
Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of corresponding judge characteristics on 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. Cross-sections between 1986 to 1989 are held as the comparison group. The vertical line marks that timing of the military coup that occurred in 1999.

Figure B.2: Robustness to alternate levels of clustering

(a) Clustering within each district separately before and after the Coup



(b) Clustering at District-Year Level



Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions on State Wins with 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. Cross-sections between 1986 to 1989 are held as the comparison group. The vertical line marks that timing of the military coup that occurred in 1999.

Figure B.3: The Shrine of Bahauddin Zakariya (left) with Trusty of the Shrine (right)



Note: The person in white turban giving blessings to the child on the right is a prominent shrine elite and current foreign minister of Pakistan.

Figure B.4: Chief Justices of Pakistan at Shrines with Religious Leaders



(a) Chief Justice of Pakistan Saqib Nisar at Data Darbar Shrine in Punjab (tenure of CJ from February 2010-January 2019) with shrine elites



(b) Former Chief Justice of Pakistan Iftikhar Chaudhary (tenure 2005-2013) at Shrine of Hazrat Sachal Sharif in Sindh with shrine elites

Figure B.5: Total vs Sampled Cases

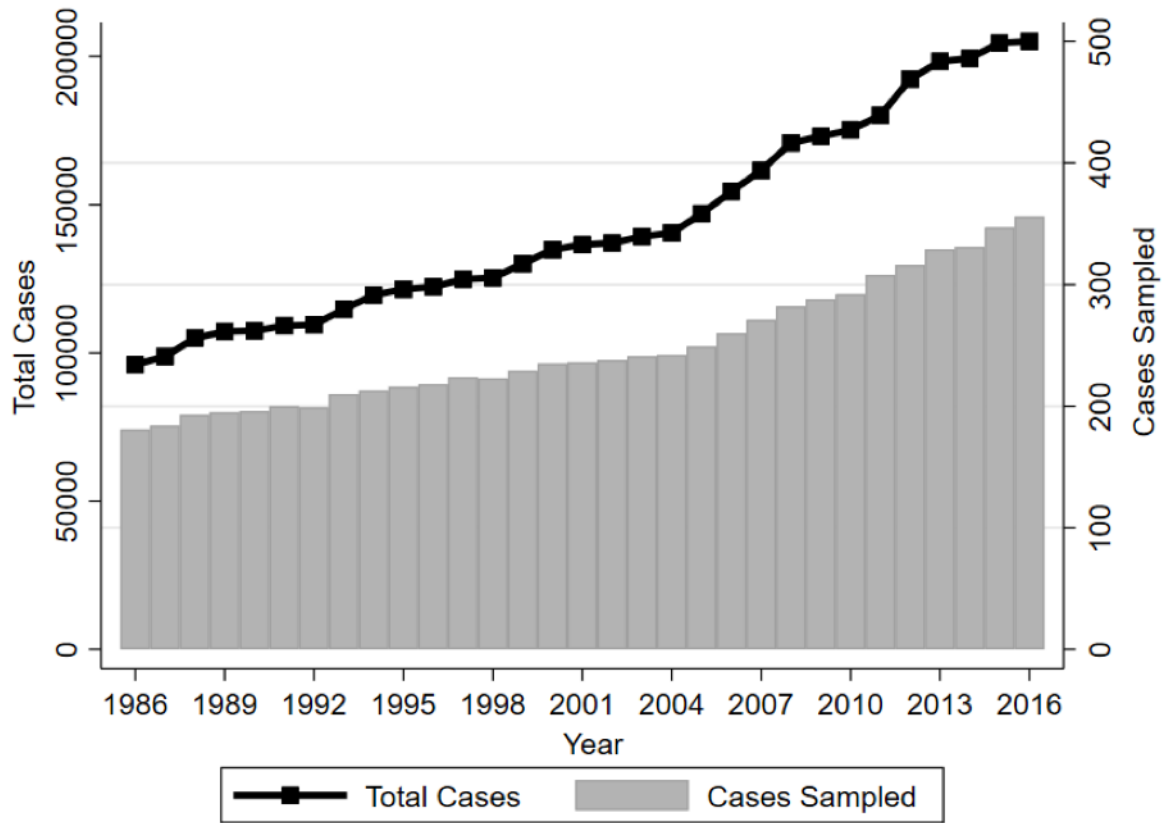


Figure B.6: British District Gazetteers

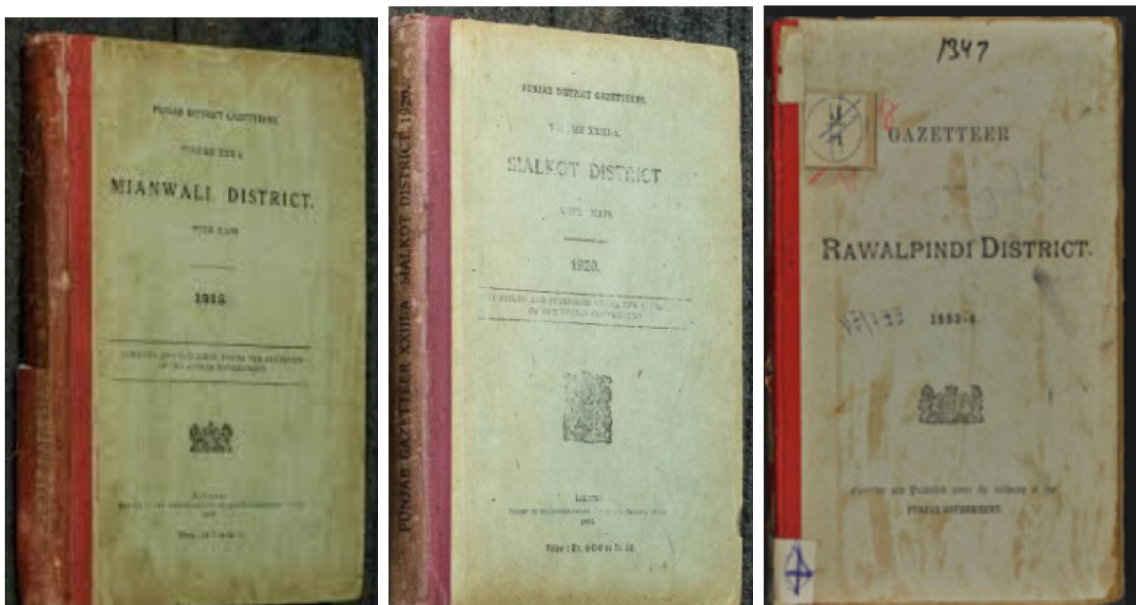


Figure B.7: Example of Land (Land Grab Case)

2005 C L C 745  
[Karachi]  
Before Sabihuddin Ahmed and Khilji Arif Hussain, JJ  
KHALID MOHSIN---Petitioner  
versus  
SECRETARY, MINISTRY OF DEFENCE, Government of Pakistan, Islamabad and 2 others---Respondents  
Constitutional Petition No.59 of 1988, decided on 23rd November, 2004.

West Pakistan Land Revenue Act (XVII of 1967)---  
---S. 45---Constitution of Pakistan (1973), Art.199---Constitutional petition---Maintainability---Disputed question of fact---Mutation, a document of title ---Petitioner claimed to be owner of the land which had been mutated in favour of his predecessor-in-interest on the basis of allotment by Settlement authorities---Question for determination was whether the petitioner had acquired any title to the land so as to entitle him to the relief of possession or whether he had locus standi to seek declaration in respect of existence or otherwise of requisition---Validity---No allotment order by a competent officer in favour of the predecessor-in-interest of the petitioner was available on record---Petitioner had relied upon an order of Assistant Rehabilitation Mukhtarkar directing that the land be mutated in the name of the predecessor-in-interest of the petitioner---Nothing was available to show that the predecessor-in-interest of the petitioner had applied for allotment of evacuee land against units available with him---Predecessor-in-interest of the petitioner was entitled to 159 units but was allotted land comprising of 453 units---Mutation entries did not confer title but could at the best be considered evidence of title which was rebuttable---Such disputed questions requiring detailed scrutiny of facts and production of evidence could not be undertaken in the proceedings under Art.199 of the Constitution---Petition was dismissed in circumstances.

Hassan Akbar for Petitioner.  
Nadeem Azhar Siddiqui, D.A.-G. and S. Tariq Ali, Federal Counsel for Respondents.  
Ahmed Pirzada, Addl. A.-G.  
Date of hearing: 29th August, 2004.

Figure B.8: Example of Land Case (Payment on land not made by government)

2009 C L C 1199  
[Karachi]  
Before Gulzar Ahmed and Malik Muhammad Aqil, JJ  
MORRIS TANVIR---Petitioner  
Versus  
FEDERATION OF PAKISTAN through Secretary Ministry of Defence, Islamabad and 2 others---Respondents  
Constitutional Petition No D-2331 of 2006, decided on 16th July, 2009.

Transfer of Property Act (IV of 1882)---  
---S. 54---Cantonment Land Administration Rules, 1937, Rr 15 & 16---Constitution of Pakistan (1973), Art 199---Constitutional petition---Amenity plot---Allotment---Plot in question was amenity plot reserved for school and petitioner contended that he purchased the same from a foreigner. Grievance of petitioner was that authorities were not issuing lease in his favour. Validity---Sale of land for any such purpose without definite order of Central Government was prohibited under Rr 15 of Cantonment Land Administration Rules, 1937---Lease could be granted under R.16 of Cantonment Land Administration Rules, 1937, for minimum period of 30 years and maximum period of 90 years through public auction for building sites---Plots meant for municipal services and amenities could not be leased, sub-leased, sold or transferred to any person or to any one class of persons for the use and enjoyment rather it had to remain as government property for public purposes for unhindered free access, use and enjoyment of public at large---In no case plots meant for municipal services and amenities could be termed as building sites nor there could be any exceptional case or exceptional reasons for disposal of such land by private agreement or otherwise---There was no document of sale and purchase of plot in question between Defence Housing Authority and the foreigner in accordance with S 54 of Transfer of Property Act, 1882---Agreement to sell relied upon by petitioner was no agreement in the eyes of law as no authority had been shown nor any seemed to exist to sign the same on behalf of the foreigner---Transfer documents relied upon by petitioner were, therefore, of no consequence being themselves illegal and without authority of law and also seemed to High Court, without consideration---It seemed to High Court that fraud had been played by petitioner and officials of Defence Housing Authority for usurping and misappropriating valuable government property and there had to be an accountability of the same---High Court directed Federal Government to hold inquiry in the whole affair and to take action against all officials and persons found responsible in usurping and misappropriating valuable government property and also to initiate criminal proceedings against such persons---High Court declined to issue any direction in favour of petitioner to authorities for issuance of lease deed---Petition was dismissed accordingly.

Ardeskar Covaajee and 10 others v. Karachi Building Control Authority (KMC), Karachi and 4 others 1999 SCMR 2883; Four Square Enterprises v. Karachi Building Control Authority PLD 2000 Kar. 161; Dr. Zahar Ansari and others v. Karachi Development Authority and others PLD 2000 Karachi 168 and Shafiqur Rehman and others v. Government of Sindh and others PLD 2006 Kar. 10 ref.

S.A. Jalib Chaudhry for Petitioner.  
Ashiq Raza, Dy. A.-G. along with Hamid Niaz, Dy. Military Estate Officer for Respondents Nos.1 and 3.  
Raja Sakandar Khan Yasir for Respondent No.2.  
Date of hearing: 7th May, 2009.



Figure B.9: Example of Human Rights case: Discrimination based on Gender

2005 Y L R 2063

[Quetta]

Before Raja Fayyaz Ahmed, C.J. and Akhtar Zaman Malghani, J

Miss MEHAK HASNAIN---Petitioner

Versus

SELECTION COMMITTEE and others---Respondents

C.P. No.159 of 2004, decided on 13th April, 2005.

Constitution of Pakistan (1973)---

---Art. 199---Constitutional petition---Educational Institution---Admission in 1<sup>st</sup> year M. B. B. S. Course---Petitioner submitted application form for admission in 1st year M. B. B. S. Course of Medical College concerned against one of reserved seats on District merit as well as for the seat reserved for doctors' children---Respondent whose father was working as Associate Professor in the college concerned and her mother as Doctor in Health Department, submitted three application forms for admission in 1st Year M. B. B. S. Course against Seats of District Merit, and categories "A" & "B" of Doctors' children seat---Respondent who could not succeed to get admission on District Merit, her forms were considered for categories "A" & "B" of doctors' children seat as in both categories she was at serial No.1 and granted her admission on seat allocated for category "A"---Respondent while submitting three application forms gave conflicting choices---In the form first in time, her first preference was on District Merit Seat and second preference was for category 'B'---Respondent having failed to get seat of District Merit, her second preference was for category 'B', but Selection Committee, instead of granting admission to her on her choice which was category 'B', granted admission to her against category 'A' which could not have been done by Selection Committee being contrary to object and option exercised by candidate and also admission policy---Choice of preferences once exercised by a candidate in his application form, would always, to all intents and purposes for admission on merits in the light of admission Policy, would be final---Selection Committee had acted arbitrarily and in excess of its authority by abusing its powers in granting admission to respondent in category 'A' instead of category 'B' which had resulted in depriving petitioner to get admission in 1st year M.B.,B.S. of the college---Impugned decision of Selection Committee was illegal, void and without any lawful authority---Authorities were directed to grant admission to petitioner on the seat reserved for category 'A' in M.B., B. S. Course.

Syed Ayaz Zahoor for Petitioner.

Salahuddin Mengal, A.G. and Zahid Malik for Respondent No.3.

Date of hearing: 29th March, 2005.

Figure B.10: Freedom of Movement Limited

P L D 2007 Quetta 41

Before Amanullah Khan Yasinza, C.J. and Akhtar Zaman Malghani, J

MIR KHALID LANGOV---Petitioner

Versus

SECRETARY, MINISTRY OF INTERIOR, GOVERNMENT OF PAKISTAN, ISLAMABAD---Respondent

Constitutional Petition No.479 of 2006, decided on 27th November, 2006.

Exit from Pakistan (Control) Ordinance (XLVI of 1981)---

---Ss. 2 & 3---Constitution of Pakistan (1973), Art 199---Constitutional petition---Placing name on Exit Control List---Petitioner had challenged in constitutional petition validity of notification whereby his name was placed on Exit Control List---No reasons, whatsoever had been mentioned in the said notification---Validity---Under subsection (3) of S.2 of Exit from Pakistan (Control) Ordinance, 1981 it was not necessary for Federal Government to specify grounds, if it would not be in the public interest, but as liberty of a citizen guaranteed by the Constitution was being curtailed, Federal Government was under legal obligation to have at least shown the basis of its intention of exercising power under subsection (3) of S.2 of Exit from Pakistan (Control) Ordinance, 1981---Federal Government on demand of court was legally bound to place on record the material which prompted it to place name on Exit Control List in order to satisfy conscience of the court and to show that such exercise was not colourable one---Contention of Standing Counsel of Federal Government regarding non-maintainability of constitutional petition without availing remedy of review available under S. of Exit from Pakistan (Control) Ordinance, 1981, was repelled, in view of the fact that reasons for placing name of petitioner on Exit Control List had neither been communicated to petitioner nor were disclosed in the impugned notification; which was necessary to enable the petitioner to avail remedy of review and in absence thereof, it was neither appropriate nor possible for petitioner to have availed such remedy of review---Constitutional petition, was maintainable, in circumstances---Impugned Notification whereby name of petitioner had been placed on Exit Control List, was declared to be bad in law, invalid and without lawful authority and same was struck down by the High Court.

PLD 2003 Kar. 705; PLD 1997 Lah. 61; 2003 CLC 246 and PLD 1999 Lah. 459 ref.

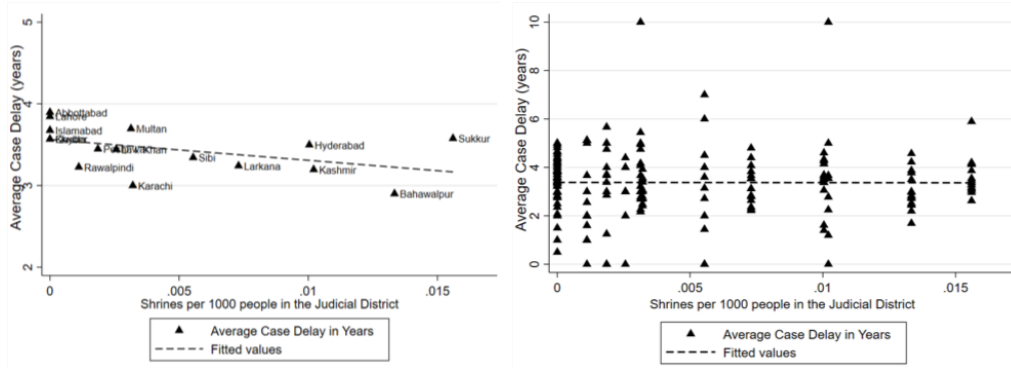
Muhammad Wasey Tareen for Petitioner.

Mumtaz Yousaf, Standing Counsel for Respondent.

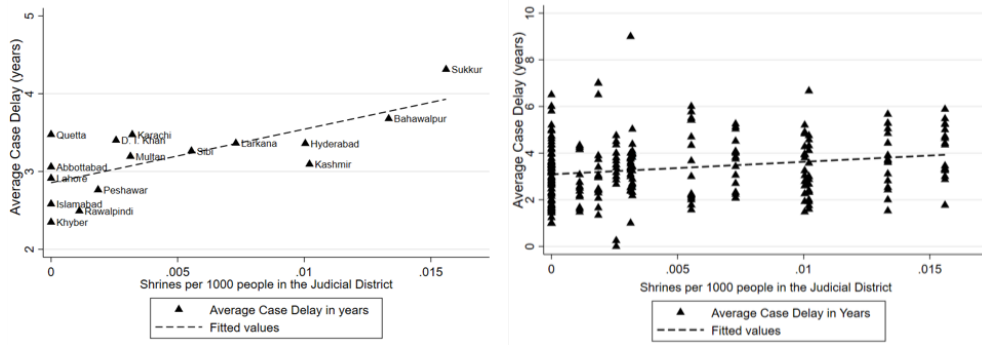
Date of hearing: 10th October, 2006.



Figure B.11: Case Delay by District Average



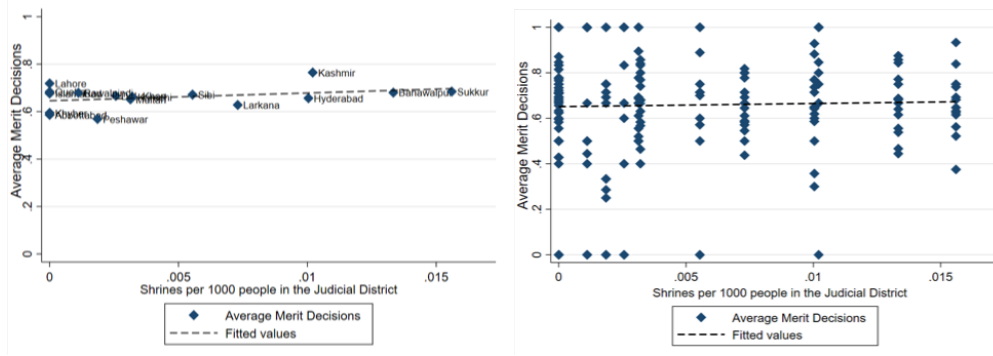
(a) Shrines and Average Case Delay Before Coup (1986-1998)



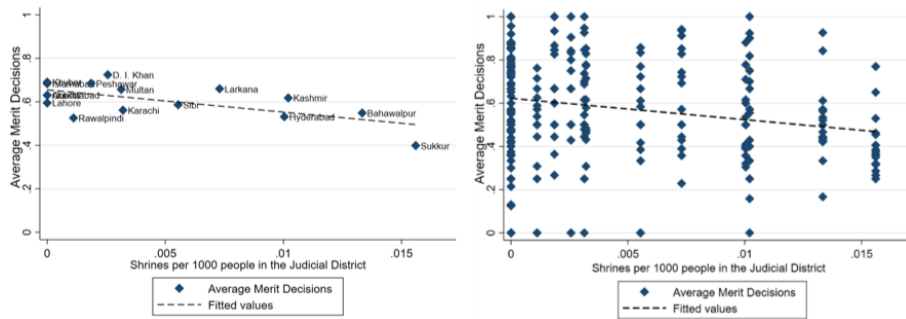
(b) Shrines and Average Case Delay After Coup (1999-2016)

Note: The figures on the left averages Case Delay by the district regardless of the year, whereas, the figures on the right provides an average of each district for a given year.

Figure B.12: Merit Decisions by District Average



(a) Shrines and Average Merit Decisions Before Coup (1986-1998)



(b) Shrines and Average Merit Decisions After Coup (1999-2016)

Note: The figures on the left averages Merit decisions by the district regardless of the year, whereas, the figures on the right provides an average of each district for a given year.