

# Religious Leaders and Rule of Law

BY SULTAN MEHMOOD AND AVNER SEROR<sup>1\*</sup>

May 2021

In this paper, we provide systematic evidence of how historical religious institutions affect the rule of law. In a difference-in-differences framework, we show that districts in Pakistan where the historical presence of religious institutions is higher, rule of law is worse. This deterioration is economically significant, persistent, and explained by the rise of religious leaders elected to political office. We explain our findings with a model where religious leaders leverage their high legitimacy to run for office and subvert the Courts. Our estimates indicate that religious leaders expropriate rents through the legal system amounting to about 0.06 percent of GDP every year. (JEL K10, K40, Z12)

*Keywords:* Leaders, Religion, Rule of Law, Judicial Subversion.

---

<sup>1\*</sup>New Economic School (E-mail: [smehmood@nes.ru](mailto:smehmood@nes.ru)), Aix-Marseille School of Economics (E-mail: [avner.seror@univ-amu.fr](mailto:avner.seror@univ-amu.fr)). We would like to thank Esther Duflo, Mohamed Saleh, Laurence Iannaccone, Jared Rubin, Jean-Paul Carvalho, Jean-Philippe Platteau, Daniel Chen, Benjamin Marx, Yann Bramoullé, François Bourguignon, Paolo Pinotti, Anirban Mitra, Marc Sangnier, David Clingingsmith, Eric Chaney, Ernesto Dal bó, Henrik Sigstad, Rinchan Mirza, Adeel Malik, Usman Mahar, Ekaterina Zhuravskaya, Ruben Enikolopov, Giacomo Ponzetto, Ameet Morjaria, Nicolas Berman, Noam Yuchtman, Eva Raiber, Thierry Verdier and seminar participants at Econometric Society Winter Meeting, the Association for the Study of Religion, Economics, and Culture, Aix Marseille School of Economics, Paris-Dauphine, ETH Zurich, NES, UPF and Bocconi for their comments and feedback. Sultan Mehmood and Avner Seror received funding from Oxford Policy Management, under the Economic Development and Institutions (EDI) research program.

*“They came with religion but no land, and left with land but no religion”*

Pakistani Historian K.K Aziz (2001)

## **I. Introduction**

History is replete with instances where religious leaders shaped the trajectories of societies. Be it Pope Urban II famously setting the stage for the crusades at the Council of Clermont, or Imam Al-Ghazali issuing his notorious fatwa against science and rationality in 11<sup>th</sup> century Persia. At least since the Enlightenment, scholars have believed that religious leaders influence institutions (Spinoza, 1670; Smith, 1776; Marx, 1844). More recently, scholars have begun to disentangle how religious authorities may impact institutions (Iannaccone, 1998; North, Wallis, Weingast, 2009; Kuran, 2011; Chaney, 2013; Rubin, 2017; Saleh and Tirole, 2019; Barro and McCreary, 2019). Yet despite these efforts, we lack systematic empirical evidence on how religious leaders influence institutions, in particular, how and why religious leaders impact rule of law.

In this paper, we provide systematic evidence for how historical religious institutions impact rule of law and how their influence is explained via subversion of justice by religious leaders. We focus on a large developing country, Pakistan, where throughout its political history, local politics was dominated by large landowning “feudal” politicians (Gilmartin, 1988).<sup>2</sup> These traditional elites controlled most of economic resources and alternated power at State, national and local levels. However, in 1999, Pakistan transitioned to a military dictatorship that would last for about 10 years. This disrupted the balance of power of these traditional elites. The military regime, through a local government reform, weakened the relatively secular traditional elite and ushered the rise of a new breed of politicians: the dynastic shrine leaders. These religious leaders, known as the *sajjada nasheen* or the “wearers of the holy turban” derived their legitimacy from religion. They commanded voluntary compliance through their religious credentials as direct descendants of Prophet Muhammad of Islam (Aziz, 2001; Malik and Mirza, 2020). As a result, these religious politicians faced different electoral costs when they ran for elections and subverted State institutions such as Courts relative to secular politicians. We show that the rise of these religious leaders to political office deteriorated rule of law and resulted in more rulings in favor of the government, in cases directly involving the religious leaders and in politically salient cases involving expropriation

---

<sup>2</sup> Pakistan with its population of over 220 million people is the 5<sup>th</sup> most populous country or the 2<sup>nd</sup> largest Muslim-majority country in the world (World Population Review, 2020).

of private property from citizens where religious leaders could capture rents through the legal system. We argue that religious leaders were better able to subvert the Courts, as their religious credentials or “legitimacy” allowed them to both rise to politics and exert arbitrary power relative to secular politicians.

We exploit the 1999 military coup in Pakistan as a shock to the political power of traditional elites and present large-scale evidence for how and why religious leaders impact rule of law. To estimate these relationships, we assemble several original datasets, including data on historical religious institutions from British colonial archives, identity of religious leaders associated with these religious institutions, whereby we use honorific titles of religious leaders in elections data to distinguish between religious and secular leaders running for elections before and after the military coup. We also digitized three decades worth of censuses and compiled a unique case-level micro data on judicial decisions coded by legal experts in Pakistan.

In particular, we focus on holy Muslim shrines built during the 12<sup>th</sup> and 13<sup>th</sup> centuries and their associated religious leaders in Pakistan. Each shrine is associated with a religious leader, believed to be the direct descendant of the Prophet Muhammad of Islam. First, we demonstrate that areas with a high number of these historic religious shrines have worse rule of law following a military coup. Second, we present evidence that the impact of shrines on rule of law is explained by the rise of religious leaders to political power who are better able to subvert the Courts than secular leaders. Third, we show the largest effect is documented in precisely the cases where religious leaders have the highest stakes i.e., where shrine leaders are directly involved in the case and where the available rents for capture are largest.

We microfound our empirical analysis and explain *why* religious leaders are better able to influence courts. In our model shrine leaders use their heightened religious legitimacy to become politicians, subvert the Courts and deteriorate rule of law. This is because shrine leaders’ religious credentials allow them to be perceived as more legitimate rulers than their secular counterparts and hence face smaller electoral costs of judicial subversion. We present evidence of this by showing that similar political leaders, absent the religious credentials, are unable to subvert the courts as effectively as the shrine leaders, when they rise to political power.

A simple OLS estimation of shrine density impact on rule of law outcomes will be confounded by omitted factors correlated with historical shrine density, such as historical commercial activity and omitted factors impacting judicial decisions. Our identification strategy relies on the timing of the military coup of 1999 as a shock to the local district high

courts in a difference-in-differences framework.<sup>3</sup> That is, we compare rule of law outcomes before and after the 1999 military coup across Pakistani districts with higher versus lower historical shrine density. We construct new measures of rule of law based on judgment texts in Pakistani local courts from 1986-2016. Our first measure of rule of law is State Wins. It is a proxy for judicial independence from the executive and 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>4</sup> As conceptualized in our theoretical model, this variable captures the influence of elected politicians on judges.<sup>5</sup> Our second measure of rule of law is Case Delay. It is the time it takes for a case to be decided relative to when it was first filed. The choice of this variable is based on the vast amount of qualitative accounts in Pakistan that suggest that judges delay cases to favor State authorities (Siddique, 2013; Arshad, 2017). Considering Case Delay as an additional outcome variable also has the advantage that it proxies for bureaucratic efficiency and is used extensively in the literature (see e.g. Djankov et al, 2003 for one of the first implementation). Finally, we construct a measure of decision quality that depends on whether the decision is based on evidence of the case rather than on legal lacunas.<sup>6</sup>

We observe that the rule of law deteriorates in places with high shrine density after the coup. In particular, we find that a standard deviation increase in shrine density increases government victories by 5 percentage points, Case Delay by 2.5 months and reduces decisions on evidence by 6 percentage points, following the coup. These are qualitatively large effects and equivalent to about 10% (mean: 50%), 6% (mean: 3.33 years) and 10% (mean: 62%), changes over the sample means, respectively. Taken together, these results indicate that high shrine density districts have worse rule of law outcomes following the military coup.

---

<sup>3</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).

<sup>4</sup> In the discussion of our model, we motivate the use of government victories as one measure of rule of law. The State in this context includes the organs of the state yielding executive power such as public agencies, federal, provincial and local governments (in line with the conceptualizations of The State as an executive organ in 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 D.1 in Empirical Appendix D.1 presents correlation coefficients of the variables coded between the two teams of coders. We obtain similar results using either dataset.

<sup>5</sup> State in our case are all government bodies that can wield executive authority i.e. where elected politicians have the opportunity to exert influence on the Judiciary and expropriate resources (Siddique, 2013). Our data later reveals that 40% of cases involving the State involve expropriation of private property by the State. State in our instance is the local, federal and provincial government. Later, we also break down State victories into its constituent parts to pin down the types of disputes driving the results.

<sup>6</sup> This variable, also coded by a law firm in Pakistan, is based on a) common law jurisprudence where decisions on merits or evidence of the case is considered an ideal that common law regimes aspired towards (Tidmarsh, 2009) b) legal scholarship in Pakistan argues that basing decisions on case merits capture rule of law (Siddique, 2013; Arshad, 2017).

We provide several pieces of evidence in favor of the identification assumption underlying our difference-in-differences estimation. First, we show that before the coup high and low shrine density districts follow similar trends. Second, consistent with the unanticipated nature of the coup and historical shrine density determined by the death of a Sufi saint, we find no evidence of confounding interactions with the coup.<sup>7</sup> Third, the coefficient estimate on the main effect displays remarkable stability even when we include as control variables post-coup interactions with a large list of available case, judge and district characteristics.

Next, we present evidence for the mechanism that the effect of historical shrine density is explained by the rise of shrine leaders to political power. First, we show that the effect of shrine density on Courts is *only* observed in those districts where religious leaders win political office, while we observe a precisely estimated null effect of shrines in districts where shrine leaders do not win office. Second, we observe as more shrine leaders rise to political power, the effect of shrine density following the coup becomes more pronounced. This suggests that shrines exert influence on judicial decisions, only insofar as shrine leaders holding political office in these districts where they enjoy heightened legitimacy.<sup>8</sup> Third, we also observe the largest effect of shrine density in judicial cases that directly involve the shrine elite. In fact, we observe a monotonically increasing effect of shrine density on rule of law as number of shrine elites elected to office increase, indicative of judicial subversion by religious leaders explaining the effect of historical shrine density on rule of law.

Fourth, we provide evidence against two competing explanations that may also explain the effect of historical shrine density on rule of law. We show wealth or political dynasties *alone* does not explain our results. In particular, we show that following the military coup, if large landowning politicians or dynastic political leaders, absent the religious credentials, win elections in high shrine density districts, we do not observe a similar deterioration in rule of law. That is, since these leaders do not enjoy religious legitimacy stemming from “holy seats” (*gaddis*) in the shrines, they do not pay a smaller electoral cost of subverting the Courts when they rise to political power, and hence are unlikely to disproportionately deteriorate rule of law

---

<sup>7</sup> These results are also consistent with quasi-random allocation of cases in district courts of Pakistan and the fact the military coup is widely recognized to be sudden and unanticipated (Bose and Jalal, 2003).

<sup>8</sup> We also estimate the direct effect of shrine leaders on rule of law. In this scenario, instead of a difference-in-differences framework, we use an instrumental variable strategy where we instrument the number of shrines elites elected in a district by shrine density interacted with a post-coup dummy. We discuss this 2SLS estimation and associated interpretation in our discussion of mechanisms. Both difference-in-differences and IV estimation paint a consistent picture that the rise of religious leaders deteriorates rule of law. We are, however, not able to use a RDD to estimate the effect of marginally winning religious leaders due data constraints.

in high shrine density districts following the coup. Therefore, absent the religious credentials, wealth from land or political capital from dynasties are unlikely to explain our results.

Last, consistent with the large number of anecdotal accounts, we present evidence that shrine leaders extract rents through the legal system by subverting judicial decisions where they can expropriate valuable resources (Aziz, 2001; Siddique, 2013; Arshad, 2017). Indeed, we find that shrines influence Court decisions in politically salient land disputes and human rights cases involving the State (where there are valuable resources available for capture by the State officials).<sup>9</sup> This suggests that shrine leaders are able to wield their political power to subvert the Courts, and exert control over the population by expropriating tangible resources (such as land) and intangible resources (like the right to an education).<sup>10</sup> A placebo test corroborates this view, since we observe no impact of high shrine density in low-stakes run-of-the-mill criminal cases following the coup, where the resources available for capture by the State are relatively less valuable.<sup>11</sup> This is compatible with anecdotal accounts 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, 2020).

The increase of State victories in land disputes with the government in high shrine density districts opens the possibility to estimate the total value of *additional* land expropriated by the government due to the influence of shrine leaders. Using values of land mentioned in the judgment texts, we estimate that one standard deviation increases in shrine density results in additional land expropriated worth 0.06% of GDP every year. This is substantial amount for a country like Pakistan and equivalent to a loss of about USD 180 million every year or slightly more than what the federal government spent on healthcare in 2016 (Pakistan Bureau of Statistics, 2016).

---

<sup>9</sup> This is also consistent with arguments made by historians (e.g. Coulson, 1964), who argue 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 in turn consolidate their power.

<sup>10</sup> Indeed, Malik and Mirza (2020) argue 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 leaders. One key quote from historical analysis by Aziz (2001, p. 159) is telling: “*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*”.

<sup>11</sup> Criminal cases too involve the State that acts as the persecution, 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, minor fraud and burglary, with relatively low political stakes. Persecution of political opponents and other politically salient cases in Pakistan take place in special National Accountability Bureau Courts, hence the criminal cases in the district high courts here are relatively apolitical in nature.

We demonstrate the robustness of these results by conducting a series of sensitivity checks. In addition to evidence for no differential trends prior to the coup and case characteristics to be similar before and after the coup, 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>12</sup> We also present evidence that the results are not driven by a potentially confounding reform in 2004 that may have impacted judicial decision-making. The results are also insensitive to exclusion of potential outliers, omitting different quantiles of shrine density districts, choice of shrine dataset, alternate specifications, different clustering of standard errors, strategic filing or changes in case composition.<sup>13</sup>

The paper contributes to several strands of the existing literature. First, it speaks to the literature on leaders and political dynasties (Jones and Olken, 2005; Dal Bó et al., 2009; Besley et al., 2011; Chaney, 2013; Chaney, 2016 and Yao and Zhang, 2015, Querubin, 2016; Geys, 2017; George, 2021 and Ferraz et al., 2020). We contribute to this literature by providing systematic evidence on the rise of religious leaders to politics, and how this deteriorates the rule of law. Closely connected to our work is Ferraz et al., (2020) who find that policies introduced by the military in Brazil increased political competition and positively impacted economic development. Although we also consider a political reform implemented under military rule, we complement the analysis of Ferraz et al (2020) as we show that more local political competition can also translate into worse rule of law outcomes, particularly when it brings religious leaders at the political helm.

Second, this paper also speaks to the literature on the conditions for establishment of rule of law in societies, and its consequences on State building (e.g. Glaeser and Shleifer, 2002; La Porta et al., 2004; Balas et al. 2009; Anderson, 2018; Acemoglu and Robinson, 2019; Bandiera et al., 2020; Acemoglu et al., 2020; Behrer et al., 2021). We complement and contribute to this literature in two ways. First, we reveal a new avenue how vulnerable democracies may experience deterioration of rule of law i.e., through religious leaders capturing rents through the legal system. Second, our paper adds to the scant literature on bureaucracies in developing countries, particularly in weakly institutionalized settings, where data is scarce, democratic institutions have not taken root, and political interference in the

---

<sup>12</sup> That is, we show that State Wins are not decreasing in shrine density prior to the coup.

<sup>13</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. The results are also robust to clustering at district level (our baseline), two-way clustering as suggested by Cameron et al. (2012) and clustering via wild bootstrap as suggested in Cameron et al. (2008) and Roodman et al. (2019). The results are also essentially similar even when we drop 50% of the districts (top and bottom 25 percentiles).

judiciary is rampant. Our paper therefore improves our understanding of the conditions under which rule of law may be undermined in the society.

Finally, our paper speaks to the growing literature on the political economy of religion (Carvalho, 2012; Carvalho, 2016; Platteau, 2017; Rubin, 2017; Barro and McCleary, 2019; Bazzi, Koehler-Derrick and Marx, 2020; Bentzen and Gokmen, 2021).<sup>14</sup> We contribute to this literature by showing how secular and religious leaders differentially impact politics and institutions. 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>15</sup> Our empirical analysis and model complements these historical analyses. Likewise, our paper speaks to Auriol, Platteau and Verdier (2019), who study the co-optation of religious leaders by autocrats. We complement this study, as we uncover that not only can religious leaders be co-opted, they can also replace traditional political elites and undermine rule of law. More broadly, this paper speaks to the studies that have shown the long-term consequences of culture and institutions (e.g. Kuran, 2011; Nunn, 2016; Lowes et al., 2017; Voigtländer and Voth, 2015). We complement these important works by documenting the role of historical religious institutions in impacting present-day rule of law.

The paper proceeds as follows. Section 2 discusses the background. Section 3 discusses data, section 4 presents our model, while our main empirical specification and results are presented in Section 5. Section 6 presents evidence for the mechanisms. The robustness analysis is conducted in Section 7. A final section concludes. Mathematical proofs and further details on data construction, its sources, and additional sensitivity tests are relegated to online Appendices.

## **II. Background**

We begin by discussing the historical context of the courts and religious leaders in Pakistan, followed by a description of decentralization reform implemented by the military regime of General Musharraf that facilitated the rise of shrine leaders to political power.<sup>16</sup>

---

<sup>14</sup>Other related works include (Clingsmith, Khwaja and Kremer, 2009; Campante and Yanagizawa-Drott, 2015; Belloc, Drago and Galbiati, 2016; Bisin, Seror and Verdier, 2019, Saleh and Tirole, 2019).

<sup>15</sup> Relatedly, Platteau (2017) provides a thorough analysis of the instrumentalization of Islam by political leaders and studies the consequences of decentralized structure of Islam.

<sup>16</sup> More detailed discussion on the structure and history of courts in Pakistan can be found in Appendix C.1.



## *II.A. 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 contains 11% of the world's Muslims and is the 5<sup>th</sup> most populous country (World Population Review, 2020). Pakistan is also home to the largest number of ancient Sufi shrines (Aziz, 2001).<sup>17</sup> Most historical sources suggest 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). The place of death of a Sufi saint determines the location of the shrine (Gilmartin, 1988). 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 (Faruqui, 2012). The shrines and associated religious leaders have continued to date. The power of these religious shrines and associated shrine leaders is likely to persist through a permanent family seat (*gaddi*). Several historians argue that shrines provide a safeguard against dilution of landed power through inheritance, since the transfer of the *gaddi* (or a 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 (Martin, 2016).

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, 2020, 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,

---

<sup>17</sup> Other prominent places with Sufi shrines include Bangladesh, Turkey and India.

historians argue that shrine custodians can combine the traditional instruments of landed elites, such as coercion, with voluntary compliance due to their high legitimacy in the community. *Sajjada nashin* played a prominent role during British rule which continues to present day Pakistan (Gilmartin, 1988; Aziz, 2001).<sup>18</sup> Pakistan's current Foreign Minister Makhdoom Shah Mahmood Qureshi and former Prime Minister Makhdoom Yousaf Raza Gilani are descendants of shrine families, and hence trustees of shrines in Pakistan.

## *II.B. From Shrine Elite to Politician*

A key institutional reform that brought many shrine leaders to political power following military coups is the decentralization reforms following military coups. For instance, General Musharraf's Devolution of Power Plan of 2000 introduced the local government system that allowed direct election of mayors or *Nazims* in Pakistan (Cheema et al., 2006). There is a vast amount of quantitative as well as historical evidence that many shrine leaders become political leaders following decentralizations at local, provincial and national levels (Waseem, 2006). Bringing local, state and national religious leaders to political power following military coups is a well-known strategy throughout history and in autocracies around the world (Chaney, 2013). Pakistan is no exception. Malik and Mirza (2020) argue that following the military coup of General Zia in 1977, there are more contestants and elected politicians whose honorific title is that of the shrine leader *Makhdoom*. For instance, they document that the total number of shrine elite contestants, proxied by *Makhdooms* running from elections in State and national assembly, rose from less than 15% to more than 30% following the military coup and consequent decentralization.

This is consistent with historical accounts that document more shrine leaders enter politics at local, provincial and federal level following all military coups in Pakistan. The most prominent examples are that of the former Prime Minister of Pakistan Makhdoom Yousaf Raza Gilani who became the mayor of Multan following General Zia's coup and Makhdoom Jamil Zaman who became member of National Assembly following General Musharraf's 1999 military coup.<sup>19</sup> Other examples of shrine leaders becoming political leaders following the military coup include Makhdoom Shah Mehmood Qureshi, Syed Sajjad Hussain Bukhari, Makhdoom Aamri Shah, Makhdoom Shahabuddin to name a few (Aziz, 2001; Martin 2016).

---

<sup>18</sup> Both Mughal emperors and British rulers have been documented to visit these shrines and donate large sums of money and land to associated shrine elites, most likely to garner support among the local population (Gilmartin, 1988; Aziz, 2001).

<sup>19</sup> One example of a prominent shrine elite is presented in Figure D1 in Appendix D.

We corroborate these anecdotal accounts by providing systematic evidence on the rise of these shrine leaders to politics following the military coup of 1999.

### III. Data

The shrine data is constructed from two key sources: British Colonial Gazettes and Auqaf Departments of the provincial Ministry of Religious Affairs.<sup>20</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>21</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 Baluchistan.<sup>22</sup> By combining these two shrine datasets, we are able to ascertain the number of shrines in every judicial district in Pakistan.<sup>23</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 it with details on all shrines mentioned in British colonial archives and provincial Auqaf departments.<sup>24</sup> Figure 1 presents the map of shrine density across judicial districts of Pakistan, while Table 1 reports the descriptive statistics of the variables used in the paper.<sup>25</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 A and C.

*Outcome variables.* — The key outcome variable is State Wins. This is a case level measure of rule of law that we use in the paper. It is constructed based on the texts of judgment orders that contain the information on the contents of the case. Following the literature (e.g. Djankov

---

<sup>20</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 districts of Punjab and Sindh (for more details see Data Appendix C.3).

<sup>21</sup> The data for Punjab and Sindh from colonial archives is compiled by the historian Rinchan Ali Mirza, for details see on this dataset see Malik and Mirza (2020). We thank him for sharing this data with us.

<sup>22</sup> Since the British directly ruled Sindh and Punjab, their official gazettes did not record the shrines of districts outside their geographical boundaries.

<sup>23</sup> We show as part of a robustness check that results are similar using either dataset.

<sup>24</sup> Details on the sampling procedure as well as further information on case-level data collection is presented in Data Appendix C.2.

<sup>25</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.

et al., 2003; La Porta et al, 2008), we asked a law firm to code these variables. In particular, the 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>26</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 Montesquieu, 1748).

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 year and the filing year. Merit is a binary variable, also coded by the law firm, that switches on if the decision is based on evidence rather than technical 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 and rule of law (see e.g. Tidmarsh, 2009 for a discussion). Moreover, legal scholars in Pakistan also argue that basing decisions on case merits is a measure of the rule of law (Siddique, 2013; Arshad, 2017).

*Main Explanatory variables.* — We use cross-district data on shrine density as recorded in 1911 from British colonial archives and Auqaf Department Archives at the Ministry of Religious Affairs in Pakistan.<sup>27</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 1).<sup>28</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. To examine our mechanism, we gather systematic data on local shrine political leaders in each judicial district using their honorific titles. Drawing on the available election data from official results published by the Election Commission of Pakistan, we construct a Shrine Elite variable that equals the number of shrine elites elected in each judicial district before and after the coup. Due to data availability, we only focus on State and National elections that are contested at the

---

<sup>26</sup> We verify the results by comparing results across two teams of coders (see discussion in Appendix C.2 and Table D1 for correlation coefficient across the two teams of coders).

<sup>27</sup> The Auqaf department records are taken from the 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>28</sup> Specifically: Shrine Density =  $\frac{\text{Number of Shrines in the Judicial District}}{\text{Total Population in the Judicial District}} \times 1000$ .

local level.<sup>29</sup> Figure 2 plots the national trend where we note following the military coup in 1999, consistent with qualitative accounts, the number of shrine leaders elected to office increases by more than 50%.<sup>30</sup>

*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 number of judges and lawyers on a case, the case type, a dummy for whether the case involved a land dispute with the government (“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, full name of the judge, education, previous employment and experience. Additional information on the districts where the courts are located is obtained from the census records which we digitize. All this data combined covers 7439 cases and 485 judges across all the district High Courts of Pakistan. See Table 1 for descriptive statistics of all the variables used in the paper.

#### IV. The Model

Pakistan's political history has been characterized by local politics dominated by large landowning feudal politicians (Gilmartin, 1988; Aziz, 2001). However, in October of 1999, Pakistan transitioned to a military dictatorship that lasted for about 10 years. In an attempt to entrench their power, the military regime implemented a local government reform designed to weaken the traditional elites and strengthen a new breed of politicians: the dynastic shrine leaders (Cheema, Khwaja and Qadir, 2006). Our mechanism explaining the differential impact on the rule of law for high and low shrine density areas is that shrine elites were able to rise to

---

<sup>29</sup> The Election Commission of Pakistan (ECP) does not keep a database on local elections, so like Mirza and Malik (2020) we cannot use it in our analysis. However, the State and national elections are held at the local i.e. “constituency” level. Moreover, qualitative accounts indicate it is a reasonable proxy for shrine elites elected at the local elections as well since there is high correlation between shrine elites elected at national, state and local elections (see e.g. Aziz, 2001).

<sup>30</sup> In our analysis of the mechanisms, we will use the location where these politicians are elected to explicitly test if the impact of shrine density on the rule of law is indeed explained by the rise of shrine leaders to political power. As with the shrines, we once again aggregate all shrines elites elected within a judicial district.

political power following the military coup. This was facilitated through the military regime implementing a local government reform that held direct elections of mayors across Pakistan.

Our model squares the rise of shrine leaders following the military coup and local government reform by the military regime, by showing that shrine leaders used their heightened religious legitimacy to compete in local political elections. Upon being elected, these shrine leaders are relatively better able than secular politicians to influence State institutions such as Courts. As a result, the rule of law deteriorates. Our model conceptualizes why this is so.

Our political economy model formalizes the logic behind the local government reform implemented by the military regime of General Musharraf and sets the micro-foundations for our empirical analysis. The model also highlights how the local government reform allowed the military regime to disrupt the power of traditional elites. The model has two stages. In the first stage, a local government reform is implemented, and both religious leaders and secular politicians choose whether or not to run for elections. In the second stage, the elected politician has the opportunity to influence judicial decisions and expropriate resources from society. We solve this game recursively and discuss the implications of the theory. Mathematical proofs are relegated to the online Appendix B.

**Judicial decisions.** We consider that in each judicial case, judges build scores for the two litigants. We focus on judicial cases involving two parties, the State versus a private citizen. For a judicial case  $c$ , ruled by judge  $j$ , we denote  $D_{cj} > 0$  the score of the private citizen, and  $P_{cj} > 0$  the score of the State. These scores are affected by the legal facts, but also by the judges' psychological biases and preferences. We assume that  $D_{cj}$  and  $P_{cj}$  are random variables, and that neither the State nor the private citizen knows their realizations before the judge adjudicates. For simplicity, we assume that both  $D_{cj}$  and  $P_{cj}$  are uniformly distributed over the segment  $[0,1]$ . Elected politicians have an incentive to influence judges' decisions, as they can extract resources from the society by increasing the likelihood of the State winning cases.<sup>31</sup> We denote  $p \in [0,1]$  the influence exerted by the elected politician on judges in cases that are politically salient. We can interpret this parameter as measuring the credible threat

---

<sup>31</sup>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 (Feldman and Geisler, 2012). Indeed, scholars have long recognized the instrumentation of the Judiciary for this resource extraction (Coulson, 1964; Platteau, 2017)). This is also consistent with the evidence we present where a large part of the rise in government victories is explained by government's land expropriation of private property with judicial impunity.

of transfer exerted by politicians on judges.<sup>32</sup> Hence, judge  $j$  rules in favor of the State when  $P_{cj} > D_{cj} - p$ , and rules in favor of the private citizen otherwise.<sup>33</sup>

In this simple framework, political influence decreases the score of the defense, so judges are more likely to rule in favor of the State when  $p > 0$ . Summing over judges and cases, we deduce in the Appendix B that the fraction of cases won by the state can be expressed as:

$$SW(p) = \frac{1}{2} + p(1 - \frac{p}{2}). \quad (1)$$

In this model,  $SW(p)$  measures the rule of law, as it is a proxy for judicial independence from the executive authority. That is, State victories in politically salient cases may be obtained by elected politicians who bend judicial decisions in their favor to extract valuable resources from the society.

**Voting decisions.** We assume that a voter  $v$  derives the utility  $u(v, i)$  from electing candidate  $i$ , with

$$u(v, i) = \ln(\theta_i - \eta p_i) + \epsilon_i + \epsilon_{iv},$$

where 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>34</sup>

When a politician exerts political influence on judges, he erodes his legitimacy. The parameter  $\eta > 0$  captures the marginal effect of the political influence exerted by candidate  $i$  on his legitimacy. Finally, we distinguish aggregate randomness  $\epsilon_i$  from idiosyncratic randomness  $\epsilon_{iv}$ , and assume that both are distributed according to a Gumbel distribution  $G(\epsilon) = e^{-e^{-k\epsilon}}$ , with  $k > 1$ .<sup>35</sup> We denote  $N = \{1, \dots, N\}$  the set of candidates. Hence, candidate  $i$  is chosen by a voter  $v$  when:

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

---

<sup>32</sup> See for instance, Iyer and Mani (2012) who document how transfers of bureaucrats were used as an instrument of punishment by Indian politicians. Similar point is made for Pakistani bureaucrats by Khan, Khwaja and Olken (2019).

<sup>33</sup> For alternative theories on judicial decision making, see, for instance, Gennaioli and Shleifer, 2007; Epstein et al 2013, pp. 25–50 and Ash and MacLeod, 2015).

<sup>34</sup> See, for instance, Rubin (2017) and Platteau (2017) for a detailed discussion of this point.

<sup>35</sup> The assumption  $k > 1$  guarantees that the mean of the distribution  $G(\cdot)$  does not diverge to infinity.

We deduce in the Appendix B that the probability  $\pi(p_i, p_{-i})$  that candidate  $i$  wins the election can be expressed as a contest function:

$$\pi(p_i, p_{-i}) = \frac{(\theta_i - \eta p_i)^k}{\sum_{j \in N} (\theta_j - \eta p_j)^k}, \quad (2)$$

with  $p_{-i}$  the vector of the influence exerted by  $i$ 's challengers.

**Political influence.** We assume that there are two types of politicians. Religious politicians derive a high legitimacy  $\theta_r$ , while secular politicians derive a low legitimacy  $\theta_s < \theta_r$ . We denote  $N_r$  and  $N_s$  the numbers of religious and secular candidates respectively. Candidate  $i$ 's utility is given by:

$$w_i(p_i, p_{-i}) = -\phi(p_i) + \pi(p_i, p_{-i}) (SW(p_i) - SW(0)), \quad (3)$$

where  $SW(p_i)$  is given in (1) and  $\pi(p_i, p_{-i})$  in (2). The function  $\phi(\cdot)$  denotes the cost of influencing judges and is assumed increasing and convex, with  $\phi(0) > 0$  the entry cost that candidates sunk when they run for the election. Upon election, politicians may extract resources from the litigants by influencing judicial decisions. The fraction of cases that are decided in favor of the State, but that should have been won by 'society' is  $SW(p_i) - SW(0)$ . Hence, in (3), when a case is wrongly decided in favor of the state, the elected politician extracts the resources at stake in the litigation, which we normalize to 1. That is an elected candidate  $i$  will exert political influence that maximizes his utility (3). Finally, each candidate decides whether or not to run for office and the optimal number of religious and secular candidates are determined by a free entry condition.

**Results.** Solving the equilibrium of this model, we establish the following result:

**Proposition 1.** Following the implementation of the local government reform by the military regime,

- (i) Politicians with religious credentials have a higher likelihood of running and winning the election.
- (ii) Upon being elected, politicians with religious credentials exert more influence on judges in politically salient cases.

The main intuition behind Proposition 1 is that politicians with religious credentials pay a smaller electoral cost when they influence Courts. Hence, high legitimacy religious candidates exert more influence on judges, and they have a higher likelihood of both becoming politicians and winning elections.



The model formalizes the logic behind our mechanism: after the coup of 1999, in order to disrupt the preexisting balance of power, the military regime implemented a local government reform that ushered the rise of a new breed of politicians: the dynastic shrine leaders. Their religious legitimacy allowed the shrine leaders to become politicians and win elections. As a result, shrine leaders were able to influence the Judiciary and extract resources from the society without incurring the commensurate cost that a secular leader would have endured. Therefore, the rise of shrine leaders to political office deteriorates the rule of law.

## V. Results

### *V.A. The Effect of the Shrines on the rule of law*

We use cross-district variation in shrine density and the timing of the military coup to identify the effect of shrine density on the rule of law. The main specification is as follows:

$$Y_{cjd t} = \theta + \kappa \text{Military Coup } 1999_t \times \text{Shrine Density at } 1911_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd t} \varphi + \varepsilon_{cjd t} \quad (4)$$

Subscripts  $c$ ,  $j$ ,  $d$  and  $t$  indexes cases, judges, district and years, respectively.  $Y$  represents respective judicial outcome where the unit of analysis is at the case level. Military Coup 1999 is a dummy variable that switches on in the post-coup period, while Shrine Density at 1911 denotes shrines per 1000 people in the judicial district.  $\delta_d$  and  $\gamma_t$  are district and year fixed effects while  $\mathbf{W}$  are case, judge and district controls reported in Table 1. Standard errors are clustered at the district level.<sup>36</sup>

The interaction between Military Coup and Shrine Density is the main variable of interest. The coefficient on this interaction term,  $\kappa$ , is the difference-in-differences estimator for the impact of shrine density on rule of law.

Table 2 estimates equation (4) using State Wins as the dependent variable. We find that a standard deviation (0.005) increase in shrine density increases State Wins by about 5 percentage points following the coup. In all specifications, we find a positive and statistically

---

<sup>36</sup> In our sensitivity analysis, we show that our results are robust to alternate clustering e.g. clustering via Wild Bootstrap (Cameron et al., 2008) or two-way clustering (Cameron et al., 2012).

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 1), suggesting that the military coup acts as a plausibly exogenous shock to the local district high courts.

Many anecdotal accounts argue that more rulings in favor of the government imply a deterioration of the rule of law in Pakistan. This is because many of the rulings in favor of the government are believed to come at the expense of poorer enforcement of property rights and land expropriation by the State (Arshad, 2017).<sup>37</sup> Nevertheless, it may be reasoned that the rise in State Wins do not necessarily capture deterioration in the rule of law. This may occur, for instance, if the expropriated land is put to productive use. This, however, seems unlikely given anecdotal accounts as well as the evidence we present next: we leverage anecdotal accounts that suggest that judges in Pakistan delay cases as a strategy to favor State authorities. This becomes obvious when government officials use the expropriated land for their private benefit while the court case is pending (Siddique, 2013). Therefore, we next estimate equation (4) by considering Case Delay as the outcome variable. Panel A of Table 3 presents these results: a standard deviation (0.005) increase in shrine density increases Case Delay by about 0.2 years or 2.5 months. This is equivalent to about 6% increase since average Case Delay is about 3 years.

Finally, it may still be argued that the increase in Case Delay following the coup may stem from more thorough deliberation on the cases. If that were true, increased Case Delay could be interpreted as an improvement in the quality of judicial decisions. Yet, our confidence that the increase in State Wins and Case Delay implies a deterioration in the rule of law is increased when we examine cases decided on the “merits” or evidence of the case. Indeed, legal scholarship in Pakistan argues that making decisions on the merits or evidence as opposed to legal technicalities is a measure of rule of law since governments use rulings on technicalities to “unfairly favor State authorities”.<sup>38</sup> We, therefore, examine how historical shrine density differentially impacted case Merits following the coup. These results are reported in Panel B of Table 3. The estimates imply that a standard deviation increase in shrine density decreases Merit decisions by about 6 percentage points (Table 3, Panel B, Column 4). Overall, the results

---

<sup>37</sup> In the next subsection V.C we examine the type of cases driving the results and show that land expropriation by the State is key in explaining this rise in ruling in favor of the government.

<sup>38</sup> For instance, ruling on technicalities in Pakistan is a “weapon of choice to rule unfairly” (Haq, 2018) and that judges use decisions on technicalities to “favour the state authorities” (Arshad, 2017).

presented in Table 2 and Table 3 paint a consistent picture that increase in shrine density deteriorated the rule of law.

#### *V.B. Threats to Identification*

The validity of our difference-in-differences approach rests on two key identifying assumptions. First, judicial outcomes should have followed parallel trends in the absence of the 1999 military coup. Although, we cannot test this assumption directly, we can evaluate if there are differential trends in high and low shrines density districts before the coup. In Figure 3 (and Figure D2 in Appendix D), we find no evidence for differential trends prior to the coup.<sup>39</sup>

Second, there should be no confounding interactions with the coup. For instance, our results may be driven by differences in type of cases or differences in judges before and after the coup. We provide evidence against this possibility. The first possible confounding interaction is that judicial cases filed following the coup in high shrine-density districts differ from those filed before the coup. If, for example, loss of faith in the judicial system following the coup disproportionately altered the type of cases filed in high shrine density districts, then we could be picking up the effect of strategic filing of cases instead of the effect of the shrines (Hubbard, 2013), although this would be competing mechanism driving the relationship between historical shrine density and rule of law, rather than a direct threat to identification, we nevertheless, show that in high shrine-density areas there are no significant changes in type of constitutional or criminal cases filed nor characteristics of cases such as number of lawyers on a case change following the coup (see Figure 4, Panel A).<sup>40</sup> Likewise, in Table D3 of Appendix D, we show that interaction of historical shrine density and post-coup dummy is uncorrelated with long a long list of case characteristics.

Another related concern is that there could be different judges ruling over cases in high shrine density districts following the coup. This may be possible since following the 1999 military coup, some judges resigned in protest. If the most independent judges exited the courts, then the numerous State Wins we observe in high shrine-density districts could reflect the effect of this endogenous exit of judges. However, this is unlikely for two reasons. One, less than 3% of judges in the High Courts exited office following the 1999 military coup, and two, we find evidence that judge characteristics in high and low shrine density districts are similar before

---

<sup>39</sup> Similar evidence of no differential trends prior to the coup is found for Case Delay and decisions on Merit.

<sup>40</sup> Identical results are obtained for land and human rights cases and other available case characteristics.

and after the coup. Specifically, in Figure 4 (Panel B), we show that high shrine-density districts do not have particularly different judges following the coup. Identical results are found for other available characteristics (see Figure D3 in Appendix D).<sup>41</sup> The evidence we present, therefore, indicate that our results are unlikely to be confounded with case or judge characteristics interacting with the military coup.

### *V.C. Type of Cases Driving the Results*

In this subsection, we present evidence on the type of cases driving our results. These turn out to be land expropriation and human rights abuse cases involving the State. 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) has 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 these historical accounts, we show how shrines impact judicial decision-making in land disputes involving the State. These results are reported in Table 4. In the first two columns of Table 4, we estimate equation (4) 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 government, a one standard deviation increase in shrine density increases State Wins by about 8 percentage points.

Tangible resources are not the only resources that governments may want to expropriate. Several historical case studies from developing countries suggest that governments also expropriate political rights as a way to consolidate their power (Platteau, 2017). One 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. These cases are separately marked as writ petitions within the constitutional cases and pertain to violation of fundamental rights such as freedom of movement, right to an education and freedom of assembly. We observe qualitatively and statistically meaningful impact of shrines in human

---

<sup>41</sup> Later we provide further evidence where we show our coefficient in main equation (4) is essentially stable even when we add large list of interactions of case, judge and district characteristics with the post-coup dummy.

rights cases: a standard deviation increase in shrine density increases State Wins by about 7 percentage points (Column 3 and 4, in Table 4). This is also consistent with discussion by historians on shrine leaders. For instance, Aziz (2001, p. 159) 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*”.

In contrast to politically salient cases involving expropriation of land and political rights cases, politicians may have little incentive to affect judicial decisions in cases where coveted resources are not at stake. For instance, everyday criminal cases involving theft or burglary are relatively less politically salient than land and political rights cases.<sup>42</sup> 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 be interpreted as conviction rates).<sup>43</sup> Table 5 presents these results. We find none of the coefficients to be 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.

---

<sup>42</sup> The persecution of political opponents and other politically salient criminal cases in Pakistan are adjudicated in special National Accountability Bureau (NAB) Courts, hence the criminal cases in the district high courts, the focus of our study, are apolitical in nature.

<sup>43</sup> Criminal cases are cases involving petty crime, theft, burglary and minor fraud. An examination of random sample of 100 cases confirms this conjecture.

### *V.D. Economic value of land expropriated due to Shrines*

We find that shrines only affect judicial decisions in land and political rights disputes with the government. Although it is hard to evaluate the economic effect of the expropriation of political rights on economic outcomes, we can estimate potential economic value of the additional land expropriations due to shrines. We use the fact that in 20% of our 7500 sampled cases, the government was successful in expropriating land, and since we randomly sampled 0.2% of the total population of cases, the government was successful in expropriating land in about 750,000 cases.

Basing computations on the average value of expropriated land in our sampled cases, we estimate that a standard deviation increase in shrine density results in additional land expropriation of about 0.06% of GDP per year.<sup>44</sup> In dollar terms, this equals about USD 180 million and is slightly more than what the federal government spent on healthcare in 2016 (Pakistan Bureau of Statistics, 2016).

Considering lower and upper bounds due to yearly fluctuations building on methodology developed by Mian and Khwaja (2005), we estimate the amount of land expropriation due to one standard deviation increase in shrines ranges from 0.03% to 0.09% of GDP from 1986-2016 (bounding by maximum and minimum year).<sup>45</sup> This, when interpreted together with the vast literature that documents property rights protection and reduction of expropriation risk is critical for economic development, suggests that increase of political power of religious leaders may lead to substantial weakening of property rights protections and consequently adversely impact long-run economic development.<sup>46</sup>

---

<sup>44</sup> We infer the average value of expropriated land from valuations presented in judgement texts. We have a value of 57 expropriated properties mentioned in the judge text which we average for our computation (i.e. the average value of expropriated property comes out to be USD 51,280).

<sup>45</sup> Table D2 and the accompanying note in Appendix D provides further information on this computation.

<sup>46</sup> See Besley and Ghatak (2010) for a review of this literature.

## VI. Mechanisms

In this section, first we present several pieces of evidence in favor of the mechanism that the impact of historic shrines on judicial decisions is explained by the rise of religious leaders to political power. Second, we test and provide evidence against two competing explanations that may instead explain the relationship between historical shrine density and judicial decisions. Finally, we estimate an alternate instrumental variable specification that makes the interpretation of the mechanism more salient and complements our baseline difference-in-differences reduced form specification by providing both the first and second stage relationships.

### *VI.A. Main Mechanism: Shrines, Religious Leaders and their Rise to Political Power*

As highlighted in our model, the key mechanism driving the relationship between historical religious institutions and the rule of law is the rise of shrine leaders to political office in high shrine districts where they enjoy high legitimacy. To test for this mechanism, we begin by conducting a falsification test: if shrine leaders elected to office are subverting the courts, we should observe *no effect* of shrine density on government victories where no shrine leader was ever elected. This is precisely what we observe: we find no such evidence for effect of shrines on government victories in cases decided in districts where no shrine elite was ever elected following the coup. If anything, the point estimates are always negative (Table 6, Columns 1 and 2). On the other hand, we find a large and statistically significant positive effect of shrine density on government victories in districts where shrine elites are elected (Table 6, Columns 3 and 4).

Second, we present more disaggregated evidence by estimating the effect of shrine density on government victories by percentile of shrine elite elected in the district. Specifically, we estimate the baseline equation (4) with State Wins as dependent variable by percentiles of shrine elite elected in the respective districts.<sup>47</sup> For instance, 0 percentile denotes cases where no shrine elite was ever elected, whereas 75-100 percentile bin contains estimates based on the cases in districts where largest number of shrine elites were elected during our sample period. Panel A of Figure 5 reports the results: remarkably even with small number of districts, we find

---

<sup>47</sup> This may assuage the concern that our result from Table 6 compares change in government victories in districts where no shrine elites are elected with districts where at least one shrine elite is elected which may be a coarse comparison.

that the positive relationship between shrine density and government victories following the coup *only* holds in districts where shrine leaders win political office.

Finally, we turn our focus to cases that *squarely* involve the shrine elite. That is, we consider the subsample of cases where the honorific of shrine elite (*Makhdoom*) appears as one of the litigants and construct an indicator variable that switches on when shrine elite obtains a favorable verdict. These are the instances where the religious leaders have plausibly the largest incentives to influence the courts. We estimate equation (4) using this indicator variable as the dependent variable. Panel B of Figure 5 presents these results on effect of shrine density on *shrine elites' legal victories* by percentiles of shrine elite elected in respective districts.

We observe that the effect of shrine density on shrine elites obtaining victories in legal cases, is also only observed, if shrine elites are elected to political office in these districts. In corroboration of our earlier finding for State Wins, the districts where no shrine elites are elected, the shrine density has no significant impact on favorable judicial decisions for the shrine elite, while there is an almost monotonically increasing relationship between shrine density and shrine elites' legal victories following the coup. That is, as more and more shrine leaders rise to political office, the effect of shrine density following the coup becomes more pronounced (Figure 5, Panel B). This implies that the effect of shrine density only matters when there are shrine elites that can capture the religious legitimacy from shrines upon rising to political power. Taken together, the evidence paints a consistent picture that the rise of shrine elites to political office is key to explain the relationship between historical shrine density and rule of law following the coup.

#### *VI.B. Evidence against Alternative Mechanisms: Wealth and Political Dynasties?*

Our model predicted that it is the heightened religious legitimacy available in high shrine districts that allows religious leaders to rise to politics and deteriorate the rule of law relative to secular politicians following the military coup. In this subsection, we examine two alternate channels of influence that may also potentially explain the relationship between historical shrine density and rule of law. First, it is possible that high historical shrine density districts see a rise of large wealthy landowning politicians elected to office following the coup who are then better able to subvert the Courts using their power from accumulated wealth (Gilmartin, 1988; Aziz, 2001). Second, it can be that in the high shrine density districts, more dynastic political leaders win political office following the coup who use political capital or



connections from dynasties to differentially influence the Courts.<sup>48</sup> To test these channels, we leverage a unique list of large landowning politicians from the Ministry of Agriculture in Pakistan and construct a novel list of dynastic political leaders in Pakistan from their last names at the local level from election data.

The large landowning cotton and sugar barons of Pakistan are traditional landed elite who are notorious for participating in elections and using their political office to seek rents through the legal system (see e.g., Herald, 2011). Nevertheless, unlike shrine leaders who derive their legitimacy to rule from religious shrines, cotton barons have typically relied on more traditional means of control such as coercion (Malik and Mirza, 2020). To test their influence, we estimate the following triple interaction specification:

$$\begin{aligned}
Y_{cjd} = & \theta + \\
& \chi \text{ Military Coup } 1999_t \times \text{Shrine Density at } 1911_d \times \text{Landowners Elected}_{dt} + \\
& \kappa \text{ Military Coup } 1999_t \times \text{Shrine Density at } 1911_d + \\
& \pi \text{ Military Coup } 1999_t \times \text{Landowners Elected}_{dt} + \rho \text{ Landowners}_{dt} + \\
& \Omega \text{ Landowners Elected}_{dt} \times \text{Shrine Density at } 1911_d + \delta_d + \gamma_t + \mathbf{W}'_{cjd} \boldsymbol{\varphi} + \\
& \varepsilon_{cjd}
\end{aligned} \tag{5}$$

Our key coefficient of interest in (5) is  $\chi$  representing the correlation of shrines following the coup when large landowners win office in high shrine density districts. Columns 1 and 2 of Table 7 reports these results. We observe that in high shrine districts, large landowning cotton barons do not deteriorate rule of law when they win elected office. This evidence supports the argument that absent the religious legitimacy granted through “holy seat” (*gaddi*) at the shrine, large wealthy landowners are not able to disproportionately deteriorate rule of law when they win elected office in high shrine districts.

Likewise, political dynasties in South Asia have also played a large role throughout its history. From Gandhi family in India, Zia family in Bangladesh to Bhutto family in Pakistan, political seats have flowed from generation to generation. Therefore, it is important to examine whether the effect of historical shrine density is instead explained by the rise of dynastic political leaders to power, who may disproportionately influence the courts, following the coup. We, therefore, re-estimate equation (5), by replacing number of large landowners with number

---

<sup>48</sup> This is also important given shrine elite are also dynastic leaders though they are different from traditional political dynasties prevalent in South Asia including Pakistan. Therefore, testing this mechanism also allows us to disentangle the effect of religious leaders from political dynastic leaders per se.

of dynastic political leaders elected in the district. These results are presented in Columns 3 and 4 of Table 7. Similar to the effect of large landowners, we do not find much evidence for dynastic political leaders driving our results. This is in contrast to the statistically significant  $\chi > 0$  when we instead estimate equation (5), by replacing number of dynastic political leaders elected with number of shrine elites elected, whose graphical representation we observed in Figure 5. These results are consistent with arguments put forth in Rubin (2017) and Platteau (2017) and more recently in Bentzen and Gokmen (2021), as well as our model, that absent the religious credentials, or *legitimacy*, wealth from large landholding or political capital from dynasties alone are unlikely to be explain the results.

### *VI.C. Alternate Instrumental Variable Specification*

We can also interpret the rise of shrine leaders as our treatment variable and estimate the direct effect of shrines leaders' election.<sup>49</sup> It may be argued, however, that the rise of shrine leaders may be endogenous, for instance if shrine leaders are elected in districts where the rule of law is worse to begin with. We can, therefore, instrument shrine leaders elected with the interaction between Shrine Density and the post-coup dummy.<sup>50</sup> This provides us a strong and plausibly excludable instrument for shrine elites elected to office.<sup>51</sup> Panel A of Table 8 reports the OLS and 2SLS estimates, while the first stage is presented in Panel B. The OLS estimates indicate that an additional shrine leader elected to office increases State victories by about 0.4 percentage points and 2SLS estimates indicate that corresponding marginal increase in shrine leader elected is associated with an increase of State victories by about 2 percentage points. This is a qualitatively large effect and equivalent to a 4% increase over the sample mean. The 2SLS coefficients are about 5 times larger than the corresponding OLS estimates indicating a potentially downward bias in the OLS estimates, arising likely due to the tendency of shrine

---

<sup>49</sup> We, unfortunately, do not have enough data to estimate an RDD to evaluate the effect of marginally winning religious leaders at the district level. Instead, we have to rely on district and time variation for identification.

<sup>50</sup> The intuition for the first-stage of this instrument would be that more shrine elites will be elected post-coup where there are historically more shrines.

<sup>51</sup> We conduct a balance test to present evidence in favor of the excludability of this instrument. Excludability restriction in this instance would be violated if the rule of law is differentially affected in shrine districts, post-coup, due to other reasons than putting religious leaders to power. For instance, post-coup there may be more high-stake constitutional cases filed in high shrine density districts where the State would win anyways. Our balance test shows this is unlikely: we show that shrine density interacted with coup is uncorrelated with a long list of case and judge characteristics (see Table D3 in Appendix D).

leaders to be elected in districts where courts are particularly anti-government to begin with, a conjecture consistent with several anecdotal accounts that argue that the military moved in particularly “hard on judicially independent” districts following the coup (Bose and Jalal, 2004).

The IV formulation also provides us a clear understanding of our reduced-reform difference-in-differences relationship outlined in our main results and the assumptions it hinges on. While it is impossible to directly test the exclusion assumption, but we do present evidence in favor of it. That is, in Table 9 we present evidence consistent with this assumption being satisfied, where we add post-coup interactions with all available case, judge and district characteristics. Even including this large list of interaction terms in the main specification (4) does not change the stability of the coefficient estimate relative to the baseline estimates in Table 2. Remarkably, the estimates only become more precise. This strongly suggests that determinants of State Wins are unlikely to be correlated with interaction of shrine density and the coup.

## **VII. Robustness**

### *VI.A. Are the estimates reflecting particularly high judicial dependence before the coup?*

The positive and statistically significant coefficient estimate of  $\kappa$  in equation (4) does not necessarily reflect an increase in State Wins in high shrine-density districts following the coup. It is possible that the positive coefficient of  $\kappa$  we observe is due to a correction of particularly low State Wins in these districts prior to the coup. For example, the military regime may 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  $\kappa > 0$  might indeed reflect the post-coup correction of particularly low State Wins prior to the coup in the high shrine-density districts. Figure 6 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>52</sup> This observation is robust to both district-wide averages (left panel) as well as district-year averages (right panel).<sup>53</sup> This implies that following the coup, the positive coefficient of  $\kappa$  we observe not a correction of particularly low pre-coup State Wins in high shrine-density districts.

### *VI.B Alternative Explanation*

One 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. 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 courts followed the precedents of higher State Wins set by the Supreme Court following the coup. 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>54</sup> We examine this alternative channel by including an additional interaction term of shrine density with a dummy that switches on for the period for which this law was in effect (2004-2009).<sup>55</sup> Table 10 (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.

### *VIC. Additional Sensitivity Checks*

In this subsection we present additional robustness checks. Figure 6 shows that shrine density is particularly high in some districts (for instance, Sukkur and Bahawalpur have 0.015

---

<sup>52</sup> Similar results hold for Case Delay and Merit decisions. Figure D.4 and D.5 in Appendix D shows that case delay is roughly constant prior to the coup and increases sharply following the coup (Figure D.4). Likewise, Merit decisions are roughly constant prior to the reform, and fall steeply following the coup (Figure D5).

<sup>53</sup> The district-year averages is the more relevant comparison, since we exploit variation across district-years in our difference-in-differences estimation.

<sup>54</sup> We do not have a common identifier for cases across the High and Supreme Courts to empirically examine this dependence.

<sup>55</sup> This law went into effect in January 2004 and was abolished in early 2010 after the democratic government passed the 18th Amendment to the Constitution of Pakistan that took away the President's power to dismiss parliament (making judicial review of the act redundant).

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 an interaction specification with a dummy that switches on for all districts, except for the ‘outlier’ districts of Bahawalpur and Sukkur. Column 3 and 4 of Table 10 presents these results, without and with the full set of controls, respectively. We observe no differential effect of exclusion of outliers on government victories. We also do a more systematic analysis to show that our results are robust to omitting different quantiles of the distribution of shrine density districts. In particular, we show that the results are robust to excluding the top and bottom 6.25, 12.5, 18.75 and 25 percentile shrine density districts. This demonstrates remarkable robustness of our results where even after dropping 50% of the districts (top and bottom 25 percentiles) our results remain strong and coefficients close to the baseline estimates. These results are presented in Table D4 of Appendix D.

Likewise, since we combine two datasets to obtain shrine density data across all district courts of Pakistan (i.e. from British Colonial Gazettes and Auqaf Department, Ministry of Religious Affairs), we test for dependency of the results on our choice of dataset. Similar to the outlier exclusion test, we construct a dummy variable 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 results in Table 10 (column 5 and 6) show no differential effect of data being from the Colonial Gazettes.<sup>56</sup>

Next, we demonstrate that the results are robust to alternative levels of clustering. Throughout the paper, we cluster standard errors at the district level. Nevertheless, we obtain similar results if we cluster standard errors using two-way clustering as suggested by Cameron et al. (2012) or cluster via Wild Bootstrap that implements a small cluster correction, as suggested in Cameron et al (2008).<sup>57</sup> Regardless of the method of clustering, our results remain statistically strong. Finally, we present evidence against strategic filing of cases (Hubbard, 2013). Table D7 in Appendix D presents these results. We find total case filing, total constitutional cases filed, and total criminal cases filed are similar in high and low shrine

---

<sup>56</sup> We also examine the robustness of the results to the 17th amendment, exclusion of potential outliers and choice of shrine dataset for Case Delay and Merit Decisions variables, where we obtain similar results. These robustness tests are presented in Table D5 in Appendix D.

<sup>57</sup> Table D6 and Figure D6 in Appendix D present these results. The “standard error” concept doesn't formally apply for small number of clusters when implementing wild bootstrap. Therefore, we compute p-values and confidence intervals instead as suggested in Roodman et al (2019).

density districts following the coup. This suggests strategic case filings in high and low shrine districts following the coup are unlikely to explain our results.<sup>58</sup>

## VIII. Conclusion

In this paper, we studied how historical religious institutions impact rule of law and how their influence is explained by the rise of religious leaders to political power. To identify plausibly causal effects, we exploit the unanticipated timing of a military coup that brought many religious leaders to political power. We demonstrate that areas with a higher historical presence of religious shrines show a large increase in government victories in Court following the military coup and a lower quality of judicial decisions. We present evidence that this deep effect of religion on rule of law was the result of religious leaders rising to politics. The shrine leaders upon winning political office subvert the courts in exactly the cases that are most salient to them. Our estimates indicate that the additional land expropriation resulting from the rise of these religious leaders to politics is in the range of 0.03% to 0.09% of GDP every year.

The analysis reveals that not only did Pakistanis had to endure military rule and consequent human rights abuses (Siddique, 2013). They also had to pay the price of the militaries' strategy to entrench their power: the rise of religious leaders to politics, and the consequent deterioration of the rule of law that materialized through the political instrumentalization of justice where religious leaders indulged in more land expropriation and political rights abuses. Long after General Musharraf's regime ended, the shrine elites continued to rule at local, State and national level, and plausibly undermined the rule of law.

Beyond the threat of obscurantism typically associated with widespread religious belief, religion may deeply interact with the functioning of formal institutions, with clergy seeking rents through the legal system. In particular, the inexorable tendency of religion to diffuse into institutions and politics still weighs on the path of prosperity of many devout societies. For these reasons, the political economy of religion deserves to be the focus of greater attention in future research as well.

---

<sup>58</sup> We find almost identical results when we conduct similar sensitivity tests for Merit and Case Delay variables (results are available on request).



## References

- Acemoglu, D., Cheema, A., Khwaja, A.I. and Robinson, J.A., 2020. Trust in state and nonstate actors: Evidence from dispute resolution in Pakistan. *Journal of Political Economy*, 128(8), pp.000-000.
- Acemoglu, D. and J.A. Robinson. 2019. *The Narrow Corridor: States, Societies, and the Fate of Liberty*. Penguin Publishing Group.
- Ali, R. (2003). "Understanding Urbanization," in S. A. Zaidi (eds.) *Continuity and Change: Socio Political and Institutional Dynamics in Pakistan*. Karachi: City Press
- Anderson, S., 2018. Legal origins and female HIV. *American Economic Review*, 108(6), pp.1407-39.
- Arshad, J. (2017). Lahore High Court Bar Council. Registrar Office. Lahore.
- Ash, E. and MacLeod, W.B., 2015. Intrinsic motivation in public service: Theory and evidence from state supreme courts. *The Journal of Law and Economics*, 58(4), pp.863-913.
- Auriol, Emmanuelle and Platteau, Jean-Philippe, (2017), Religious co-option in autocracy: A theory inspired by history, *Journal of Development Economics*, 127, issue C, p. 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 Books.
- Balas, A., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A., 2009. The divergence of legal procedures. *American Economic Journal: Economic Policy*, 1(2), pp.138-62.
- Bandiera, O., Best, M.C., Khan, A.Q. and Prat, A., 2020. The Allocation of Authority in Organizations: A Field Experiment with Bureaucrats (No. w26733). National Bureau of Economic Research.
- Barro, Robert J and Rachel McCleary. 2019. *The Wealth of Religions: The Political Economy of Believing and Belonging*. Princeton University Press.
- Bazzi, S., Koehler-Derrick, G. and Marx, B., 2020. The institutional foundations of religious politics: Evidence from indonesia. *The Quarterly Journal of Economics*, 135(2), pp.845-911.
- Behrer, A.P., Glaeser, E.L., Ponzetto, G.A. and Shleifer, A., 2021. Securing property rights. *Journal of Political Economy*, 129(4), pp.1157-1192.
- 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.
- Besley, T. and Ghatak, M., 2010. Property rights and economic development. In *Handbook of development economics* (Vol. 5, pp. 4525-4595)
- Besley, Timothy, Montalvo, Jose G. and Reynal-Querol, Marta, (2011), Do Educated Leaders Matter?, *Economic Journal*, 121, issue 554.
- Bentzen, J. and Gokmen, G., 2021. *The Power of Religion*. Mimeo.
- 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.
- Bose, S. and Jalal, A., 2003. *Modern South Asia: History, culture, political economy: Second edition*. 1-253. 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.

Cameron, A. Colin & Gelbach, Jonah B. & Miller, Douglas L., 2008. "Bootstrap-Based Improvements for Inference with Clustered Errors," *The Review of Economics and Statistics*, MIT Press, vol. 90(3), pages 414-427, August.

Cameron, A. Colin & Gelbach, Jonah B. & Miller, Douglas L., 2011. "Robust Inference With Multiway Clustering," *Journal of Business & Economic Statistics*, American Statistical Association, vol. 29(2), pages 238-249.

Carvalho, J.P., 2013. "Veiling," *The Quarterly Journal of Economics*, Oxford University Press, vol. 128(1), pages 337-370.

Carvalho, J.P., 2016. Identity-based organizations. *American Economic Review*, 106(5), pp.410-14.

Chaney, E., 2013. "Revolt on the Nile: Economic Shocks, Religion, and Political Power," *Econometrica*, Econometric Society, vol. 81(5), pages 2033-2053, September.

Chaney, E., 2016. Religion and the rise and fall of Islamic science. Work. Pap., Dep. Econ., Harvard Univ., Cambridge, MA. Cheema, A., Khwaja, A.I. and Qadir, A., 2006. Local government reforms in Pakistan: context, content and causes. *Decentralization and local governance in developing countries: A comparative perspective*, (2), pp.257-284.

Clingingsmith, David, Khwaja, Asim Ijaz and Kremer, Michael, (2009), Estimating the Impact of The Hajj: Religion and Tolerance in Islam's Global Gathering, *The Quarterly Journal of Economics*, 124, issue 3, p. 1133-1170.

Coulson, N.J., 1964. *The concept of progress and Islamic law*. Routledge.

Dal Bó, Ernesto, Dal Bó, Pedro and Snyder, Jason, (2009), Political Dynasties, *Review of Economic Studies*, 76, issue 1, p. 115-142.

Djankov, Simeon, Rafael LaPorta, Florencio Lopez de Silanes and Andrei Shleifer. 2003. "Courts." *Quarterly Journal of Economics* 118(2):453–517.

Epstein, L., Landes, W.M. and Posner, R.A., 2013. *The behavior of federal judges: a theoretical and empirical study of rational choice*. Harvard University Press.

Faruqi, M.D., 2012. *The princes of the Mughal empire, 1504–1719*. Cambridge University Press.

Feldman, S. and Geisler, C., 2012. Land expropriation and displacement in Bangladesh. *The Journal of Peasant Studies*, 39(3-4), pp.971-993.

Ferraz, C., Finan, F. and Martinez-Bravo, M., 2020. Political Power, Elite Control, and Long-Run Development: Evidence from Brazil (No. w27456). National Bureau of Economic Research.

Gennaioli, N. and Shleifer, A., 2007. The evolution of common law. *Journal of Political Economy*, 115(1), pp.43-68.

George, S.E., 2020. Like father, like son? The effect of political dynasties on Economic Development.

Geys, B. (2017). Political Dynasties, Electoral Institutions and Politicians' Human Capital. *Economic Journal*, 127(605):474–494.

Gilmartin, D., 1988. *Empire and Islam: Punjab and the making of Pakistan*. Berkeley: University of California Press.

Glaeser, E.L. and Shleifer, A., 2002. Legal origins. *The Quarterly Journal of Economics*, 117(4), pp.1193-1229.

Haq, I. (2018). Supreme Court Bar Council. Islamabad.

Herald. 2011. Herald Exclusive: Not so Blind Justice. Retrieved from: <https://www.dawn.com/news/614820/herald-exclusive-not-so-blind-justice>

Hubbard, W.H., 2013. Testing for change in procedural standards, with application to *bell atlantic v. twombly*. *The Journal of Legal Studies*, 42(1), pp.35-68.

- Iannaccone, L.R., 1998. Introduction to the Economics of Religion. *Journal of economic literature*, 36(3), pp.1465-1495.
- Iyer, L. and Mani, A., 2012. Traveling agents: political change and bureaucratic turnover in India. *Review of Economics and Statistics*, 94(3), pp.723-739.
- Iyer, S., 2016. The new economics of religion. *Journal of Economic Literature*, 54(2), pp.395-441.
- Jones, B. F. and Olken B. A., 2005. "Do Leaders Matter? National Leadership and Growth Since World War II", *The Quarterly Journal of Economics*, Volume 120, Issue 3, August 2005, Pages 835–864,
- Khan, A.Q., Khwaja, A.I. and Olken, B.A., 2019. Making moves matter: Experimental evidence on incentivizing bureaucrats through performance-based postings. *American Economic Review*, 109(1), pp.237-70.
- 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, R., Glaeser, E.L., Lopez-de-Silanes, F. and Shleifer, A., 2004. Do institutions cause growth?. *Journal of economic Growth*, 9(3), pp.271-303.
- Lowes S, Nunn N, Robinson JA, Weigel J. 2017. The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom. *Econometrica*.; 85 (4), pp. 1065-1091.
- Malik, A. and Mirza, R.A., 2020. Pre-colonial Religious Institutions and Development: Evidence through a Military Coup (No. 2018-04). Centre for the Study of African Economies, University of Oxford.
- Khwaja, A.I. and Mian, A., 2005. Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), pp.1371-1411.
- Montesquieu 1748, *L'Esprit des Lois*, Les Editions de Londres
- Nunn N. 2008. The Long Term Effects of Africa's Slave Trades. *Quarterly Journal of Economics*; 123 (1), pp. 139-176.
- Pakistan Bureau of Statistics (2016). Health Expenditures and GDP Figures. Retrieved From: [http://www.finance.gov.pk/survey/chapters\\_18/11-Health.pdf](http://www.finance.gov.pk/survey/chapters_18/11-Health.pdf)
- Platteau, J.P. 2017. *Islam Instrumentalized*. Cambridge Studies in Economics, Choice, and Society Cambridge University Press.
- Olea, J.L.M. and Pflueger, C., 2013. A robust test for weak instruments. *Journal of Business & Economic Statistics*, 31(3), pp.358-369.
- Pound, R. 1963. *The Spirit of the Common Law*. Dartmouth alumni lectureships on the Guernsey Center Moore Foundation Beacon Press.
- Querubin, P. (2016). Family and Politics: Dynastic Persistence in the Philippines. *Quarterly Journal of Political Science*, 11(2):151–181.
- Roodman, D., Nielsen, M.Ø., MacKinnon, J.G. and Webb, M.D., 2019. Fast and wild: Bootstrap inference in Stata using boottest. *The Stata Journal*, 19(1), pp.4-60.
- 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.
- Saleh, Mohamed & Tirole, Jean, 2019. "Taxing Identity: Theory and Evidence from Early Islam," CEPR Discussion Papers 13705, C.E.P.R. Discussion Papers.
- Sait, Siraj and Hilary Lim. 2006. *Land, law and Islam: property and human rights in the Muslim world*. Vol. 1 Zed Books.
- Siddique, O., 2013. *Pakistan's experience with formal law: an alien justice*. Cambridge university press.
- Spinoza, B. 1670. *Tractatus Theologico-Politicus*. Henricus Künraht. Amersdam.
- Smith, A., 1776. *The wealth of nations*. W. Strahan and T. Cadell. London

Suvorova, A., 2004. Muslim Saints of South Asia: the eleventh to fifteenth centuries. Routledge.

Tidmarsh, J., 2009. Resolving Cases on the Merits. Denv. UL Rev., 87, p.407.

Martin, Ni. 2016. Politics, landlords and Islam in Pakistan. New Delhi: Routledge.

Marx, K., 1844: "Contribution to the Critique of Hegel's Philosophy of Right," in On Religion. Chico: Scholars Press.

Naseer, Tahir. 2019. "IHC suspends decision to cancel JUI-F leader Hafiz Hamdullah's citizenship." <https://www.dawn.com/news/1513576>.

North, D.C., Wallis, J.J. and Weingast, B.R., 2009. Violence and social orders: A conceptual framework for interpreting recorded human history. Cambridge University Press.

Voigtländer, N. and Voth, H.J., 2015. Nazi indoctrination and anti-Semitic beliefs in Germany. Proceedings of the National Academy of Sciences, 112(26), pp.7931-7936.

Waseem, M., 2006. Democratization in Pakistan: A study of the 2002 elections. Oxford University Press, USA.

World Population Review. 2020. Pakistan Population 2020. Retrieved from: <https://worldpopulationreview.com/countries/pakistan-population/>

Yao, Yang and Zhang, Muyang, (2015), Subnational leaders and economic growth: evidence from Chinese cities, Journal of Economic Growth, 20, issue 4, p. 405-436.

## Tables and Figures

**Table 1: Descriptive Statistics**

Variables	Observations	Mean	Std. Dev.	Min	Max
<i>Panel A: Outcome Variables and Case Characteristics (by cases)</i>					
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
Shrine Elite Wins	811	0.49	.50	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
<i>Land Cases</i>	7,439	0.41	0.49	0	1
<i>Human Rights Cases</i>	7,439	0.31	0.46	0	1
Criminal Cases	7,439	0.28	0.44	0	1
Pages of Judgment 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
<i>Panel B: Judge Characteristics (by judges)</i>					
Tenure at Decision	485	3.08	2.22	0	22
Gender	485	0.96	0.18	0	1
Promoted to SC	485	0.05	0.23	0	1
Former Judge	485	0.11	0.31	0	1
Fr. Office-Holder Bar. Ass.	485	0.57	0.49	0	1
Former Lawyer	485	0.89	0.31	0	1
Post-Reform Judge	485	0.28	0.45	0	1
<i>Panel C: Treatment Variables and District Characteristics (by district-year)</i>					
No. of shrines per 1000	448	0.005	0.005	0	0.016
Military Coup	448	0.620	0.485	0	1
# of Shrine Elites Elected	448	7.704	4.429	0	26
Total Judges in district	448	14.92	5.875	6	30
Area (sq. km)	448	4297.55	3198.99	906	13297
Population	448	2300400	2497923	22454.11	1.14E+07
Density (per sq. km)	448	1179.004	1834.02	8.46	9023.83

*Note:* This table reports the summary statistics for the baseline sample of 7439 cases, 485 judges covering the District High Courts in Pakistan over the 1986-2016 period

**Table 2: Impact of Shrine Density 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]	9.652** [3.398]
District and 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 Dep. Variable	0.502	0.502	0.502	0.502

Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table 3: Impact on Decision Quality – Case Delay and Decisions on Merit**

Panel A: Case Delay				
	<i>Case Delay</i>			
	(1)	(2)	(3)	(4)
Shrine Density 1931 X Coup 1999	56.87** [19.87]	39.58** [15.78]	41.52** [15.59]	41.04** [15.47]
District and 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	0.082	0.084	0.086	0.086
Mean Dep. Variable	3.33	3.33	3.33	3.33
Panel B: Decisions on Merit				
	<i>Decisions on Merit</i>			
	(1)	(2)	(3)	(4)
Shrine Density 1931 X Coup 1999	-9.587*** [1.980]	-12.10*** [1.534]	-12.42*** [1.522]	-12.28*** [1.485]
District and 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	0.079	0.080	0.085	0.086
Mean Dep. Variable	0.625	0.625	0.625	0.625

Robust standard errors in brackets (clustered at district level), In Panel A, the dependent variable is case delay, it is the time it takes for the case to be decided relative to the filing year, while in Panel B, the dependent variable is Decisions on Merit, this is a dummy variable that switches on if the case is ruled on evidence or merits of the case, relative to a technicality. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 4: Impact on State Wins (by type of Constitutional Case)**

	Land Cases		Human Rights Cases	
	<i>State Wins</i>			
Shrine Density 1931 X Coup 1999	13.49*** [3.485]	17.31*** [4.999]	14.45*** [3.718]	13.71*** [4.239]
District and 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	2,345	2,345
R-squared	0.082	0.088	0.051	0.057

Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 5: Placebo on Mechanisms – Impact on Criminal Cases**

	(1)	(2)	(3)	(4)
VARIABLES	<i>State Wins (Criminal Convictions)</i>			
Shrine Density 1931 X Coup 1999	-2.534 [5.340]	0.0267 [6.169]	-1.722 [5.662]	-1.813 [5.514]
District and 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

Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 6: Placebo – Impact of Shrine Density with and without Shrine Leaders**

	No Shrine Elite Elected		At least 1 Shrine Elite Elected	
	(1)	(2)	(3)	(4)
<i>State Wins</i>				
Shrine Density 1911 X Coup 1999	-3.716 [4.144]	-4.930 [4.860]	10.78*** [3.001]	11.27*** [3.766]
District and Year Fixed Effects	Yes	Yes	Yes	Yes
District, Case and Judge Controls	No	Yes	No	Yes
Observations	663	663	6,776	6,776
R-squared	0.111	0.141	0.045	0.056
Mean dependent variable	0.502	0.502	0.502	0.502

Robust standard errors in brackets (clustered at district level). In the first column, the dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The first two columns contains estimates of the baseline equation on the subsample of cases from districts that never had a shrine elite elected to office (Abbottabad and Kashmir), while the last two columns considers the cases in remaining districts with at least one shrine leader was elected over our sample period. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.



**Table 7: Impact of Shrines by Large Landowners and Dynastic Political Leaders on State Wins**

	Large Landowners Elected		Dynastic Leaders Elected	
	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrines Density	0.612	0.824	-	-
X Large Landowners Elected X Coup 1999	[3.488]	[3.487]		
Shrines Density	-	-	0.682	0.756
X Dynastic Leaders Elected X Coup 1999			[0.491]	[0.505]
Shrine Density 1931 X Coup 1999	6.844** [2.999]	6.834* [3.385]	5.673* [2.667]	6.248* [3.193]
District and Year Fixed Effects	Yes	Yes	Yes	Yes
Interactions corresponding to eq. (5)	Yes	Yes	Yes	Yes
District, Case and Judge Controls	No	Yes	No	Yes
Observations	7,439	7,439	7,439	7,439
R-squared	0.045	0.055	0.045	0.056
Mean Dep. Variable	0.502	0.502	0.502	0.502

Robust standard errors in brackets (clustered at district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Large Landowners are number cotton magnates elected in the district. The Dynastic Leaders Elected are all non-shrine dynastic leaders elected over the sample period and switch on when elected politicians take the following last names: Bhutto, Sharif, Hoti, Khattak, Khokar and Leghari. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1 as well as all corresponding terms as depicted in equation (5). The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 8: Impact of Shrine Elite on State Wins**

	OLS		2SLS, 2 <sup>nd</sup> Stage	
	(1)	(2)	(3)	(4)
<i>State Wins</i>				
Shrine Elite	0.00439** [0.00193]	0.00468** [0.00165]	0.0218*** [0.00427]	0.0216*** [0.00623]
District and Year Fixed Effects	Yes	Yes	Yes	Yes
Judge, Case and District Controls	No	Yes	No	Yes
Observations	7,439	7,439	7,439	7,439
R-squared	0.044	0.055	0.024	0.037
Mean of dependent variable	0.502	0.502	0.502	0.502
Panel B: First-Stage Results				
	<i>Shrine Elite</i>			
Shrines Density 1911 X Coup 1999			428.13*** [92.22]	446.67*** [83.41]
District and Year Fixed Effects			Yes	Yes
Judge, Case and District Controls			No	Yes
Observations			7,439	7,439
R-squared			0.599	0.613
Mean of dependent variable			8.90	8.90
F- Statistics			21.555	28.689

Robust standard errors appear in brackets (clustered at the district level). In Panel A, the dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Elite are number of shrine leaders elected in a judicial district. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. First stage results are presented in Panel B where the dependent variable is number of shrine elites elected. Effective F statistics for clustered standard errors due to Oleva and Pflueger (2013) are also reported. Table D3 in Appendix D present a balance test for the instrument. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table 9: Evidence against Confounding Interactions with the Coup**

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 X Coup 1999	9.654** [3.398]	10.46*** [3.173]	10.66*** [3.176]	10.79*** [2.620]
District and Year Fixed Effects	Yes	Yes	Yes	Yes
District, Case and Judge Controls	Yes	Yes	Yes	Yes
Case Characteristics X Coup 1999	No	Yes	Yes	Yes
Judge Characteristics X Coup 1999	No	No	Yes	Yes
District Characteristics X Coup 1999	No	No	No	Yes
Observations	7,439	7,439	7,439	7,439
R-squared	0.055	0.061	0.062	0.063
Mean Dep. Variable	0.502	0.502	0.502	0.502

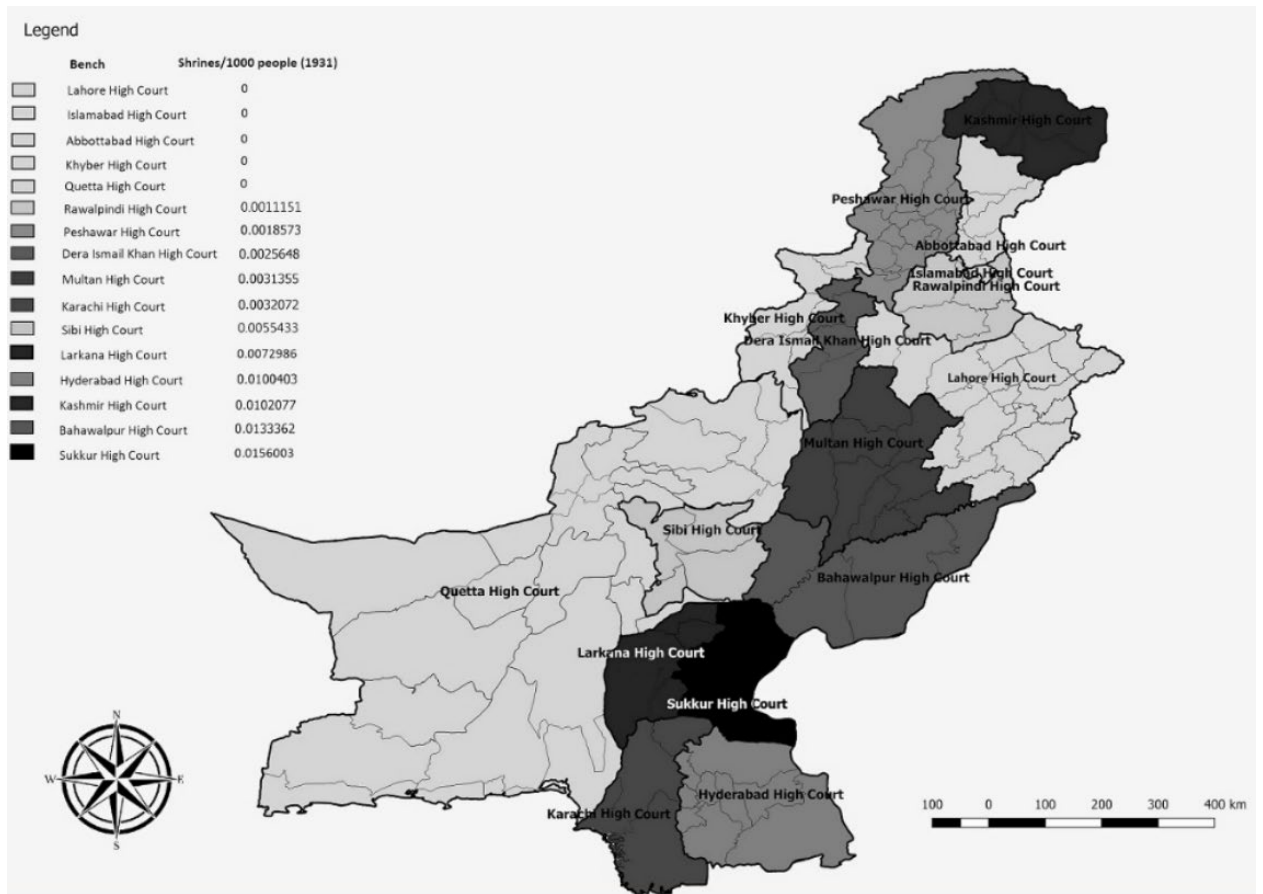
Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1 as well as their interactions with the post-coup dummy. The case controls also include case-type fixed effects. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

**Table 10: Robustness Tests: 17<sup>th</sup> Amendment, Outliers and Shrine Dataset**

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>State Wins</i>					
Shrine Density 1931 X Coup 1999	9.160*** [2.931]	9.586** [3.344]	9.448** [3.319]	9.712** [3.654]	7.315** [3.204]	8.737** [3.763]
Shrine Density 1931 X 17 <sup>th</sup> Amendment X Coup 1999	0.436 [2.998]	0.195 [2.741]				
Shrine Density 1931 X Outliers Excluded X Coup 1999			-0.749 [3.288]	-0.649 [3.536]		
Shrine Density 1931 X Colonial Gazette X Coup 1999					2.075 [3.239]	0.901 [3.090]
District and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
District, Case and 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 dependent variable	0.502	0.502	0.502	0.502	0.502	0.502

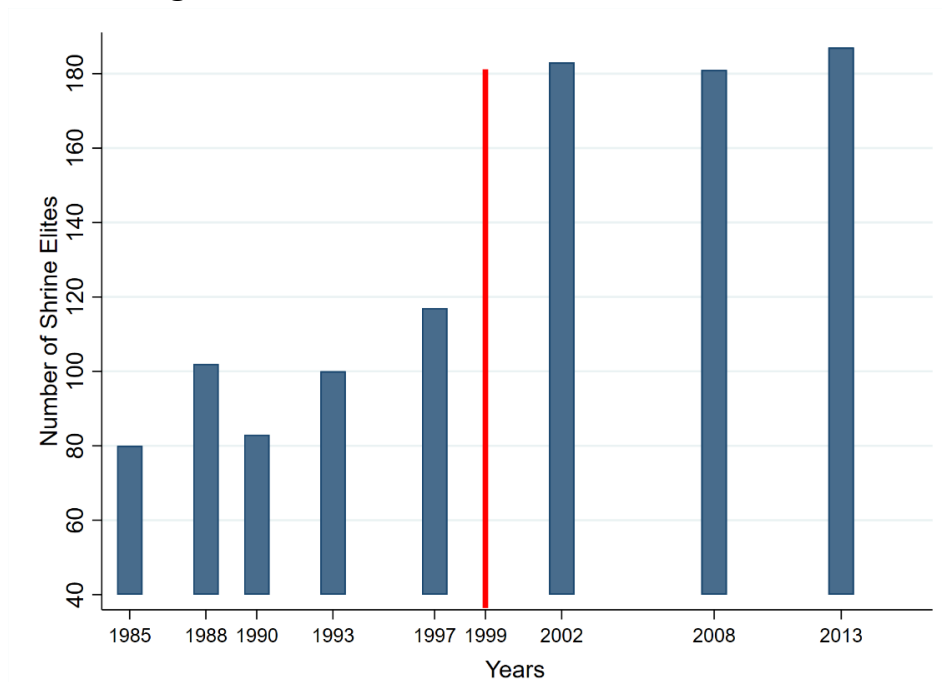
Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. 17<sup>th</sup> Amendment is a dummy switches on for the period when this law was in effect (2004-2009). Outlier Excluded is a variable that switches on for all districts, except for the outlier districts of Bahawalpur and Sukkur. Colonial Gazette is a dummy 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 controls include all district, case and judge characteristics shown in Table 1. The case controls also case-type fixed effects and additional interactions to account for differential affects post-coup. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure 1: Map of Shrine Density in Judicial Districts of Pakistan**



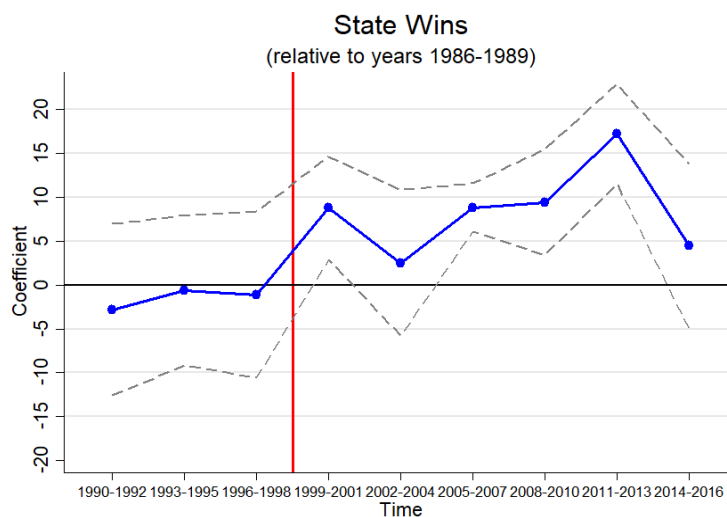
Note: The shrine data covers all of Pakistan where shrine density is computed by total number of shrines in the judicial jurisdiction divided by the population.

**Figure 2: Number of Shrine Elites and Elections**



Note: The figure above shows number of shrine elites contesting elections in every national and State election from 1985 to 2016 that were held at local (constituency) level. This includes State and national elections of 1985, 1988, 1993, 1997, 2002, 2008 and 2013. The honorific title of “Makhdoom” and “Syed” is used to determine the identity of the shrine leader. The data taken from official results published by the Election Commission of Pakistan. The vertical line marks the 1999 military coup by General Musharraf.

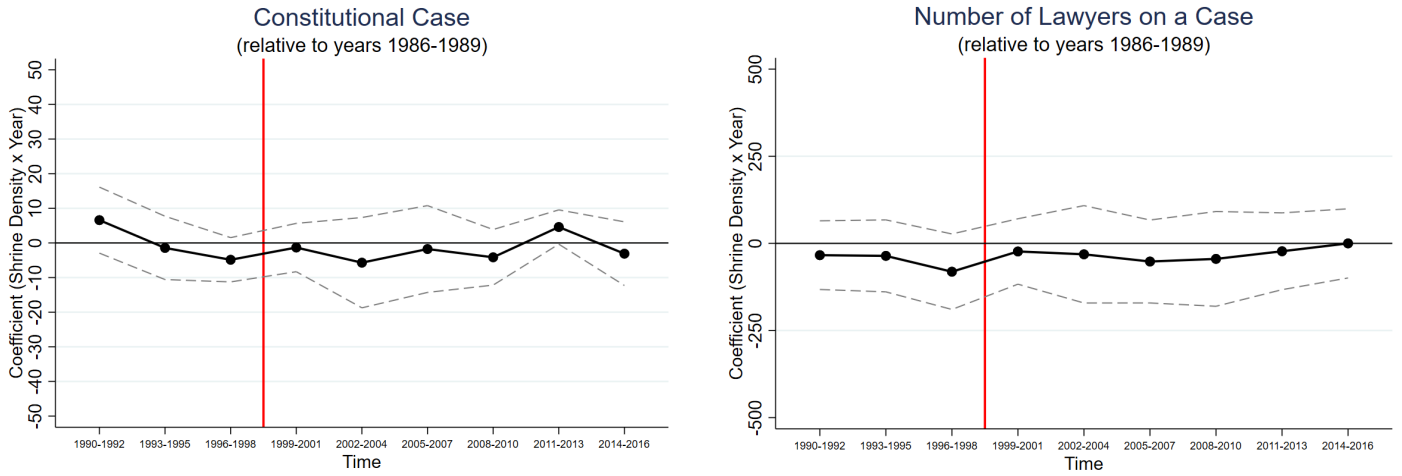
**Figure 3: Time varying impact of military coup (90% CI)**  
State Wins coefficient over time



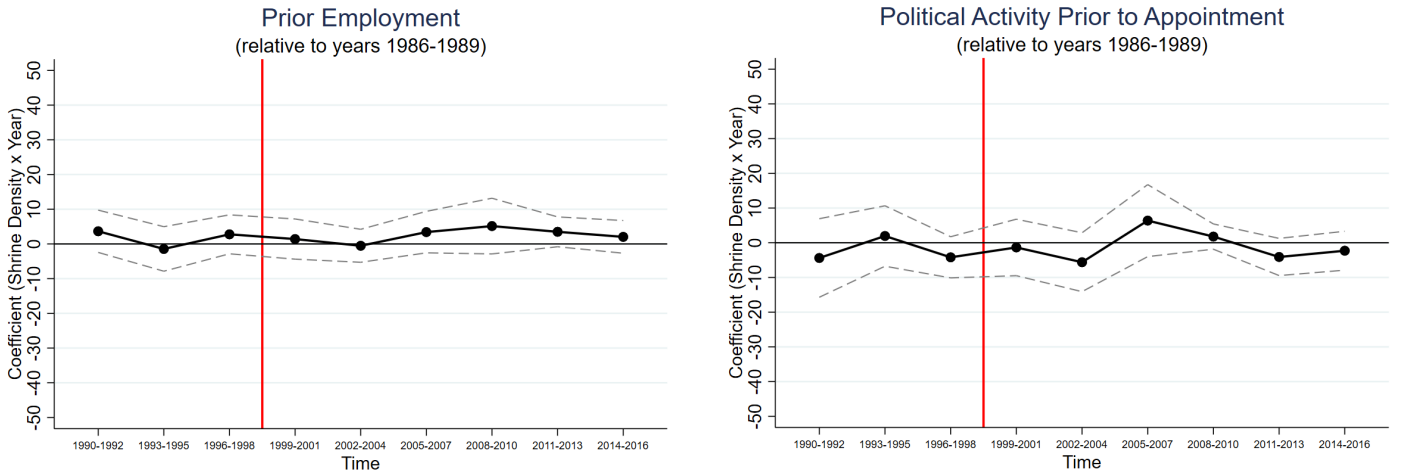
Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of State Wins on 2-year interval dummies interacted with shrine density in the district along with case, judge and district controls as well as district and year fixed effects. Cross-sections between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

**Figure 4: Potentially Confounding Interactions with the Coup**

**Panel A: Case Characteristics (Constitutional Case and Number of Lawyers on a Case)**



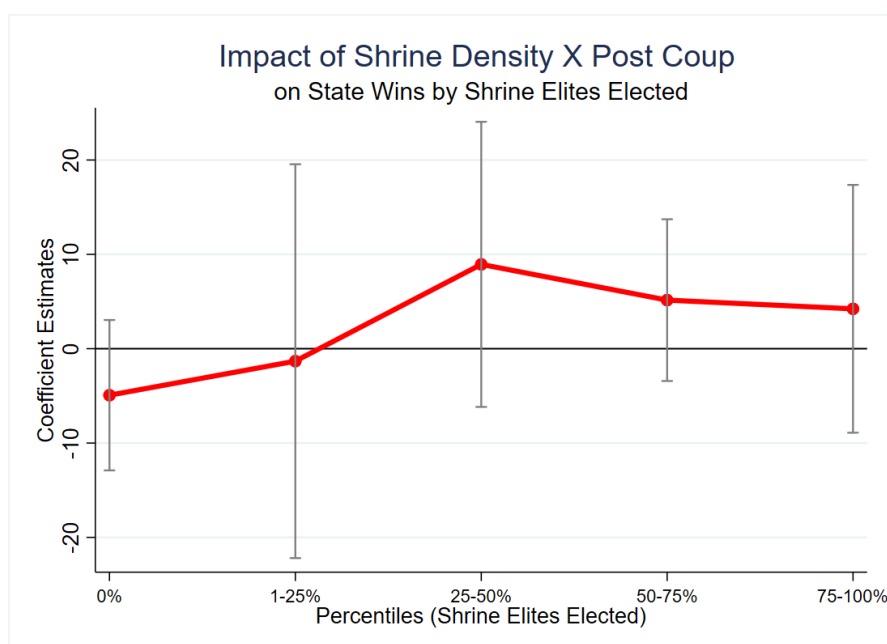
**Panel B: Judge Characteristics (Prior employment and Political Activity prior to Judicial Appointment)**



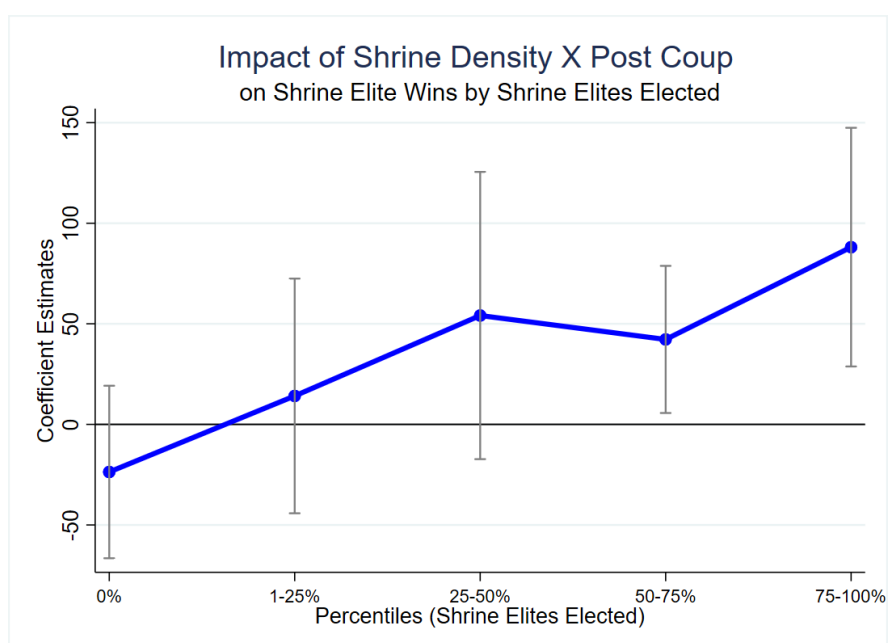
Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of case or judge characteristics on 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. 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 D.3 in Appendix D.

**Figure 5: Impact of Shrine Density by Shrine Elite Elected**

Panel A: Impact of Shrines on State Wins by Percentiles of Shrine Elite Elected



Panel B: Impact of Shrines on Shrine Elite Victories by Percentiles of Shrine Elite Elected

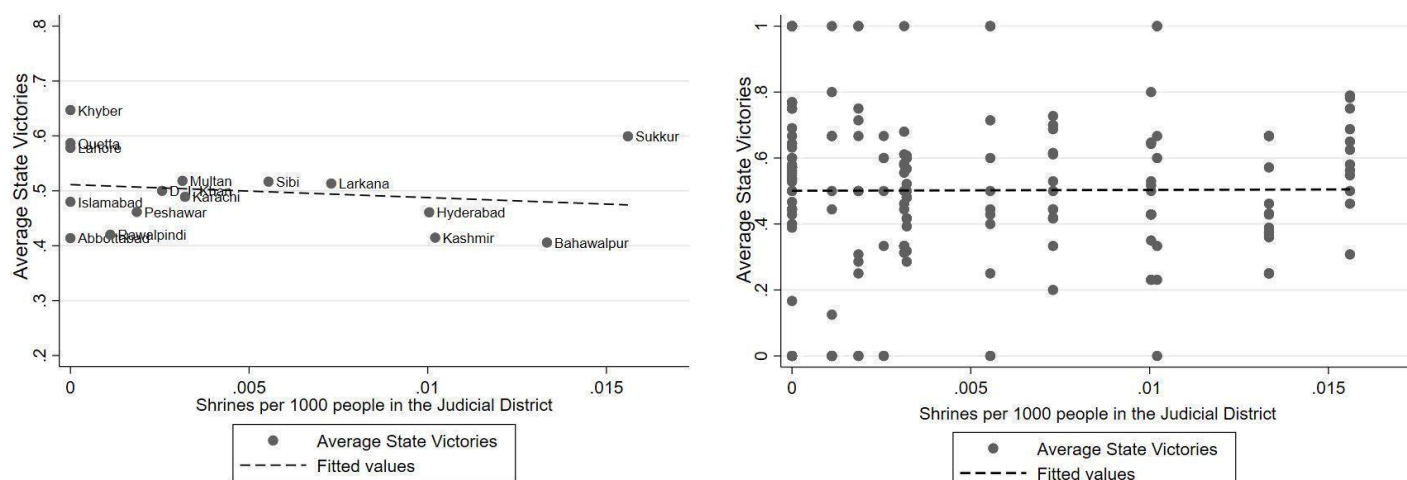


*Note:* The figure plot estimates from baseline difference-in-differences equation (4) by elected shrine elite percentiles. 0 percentile represent cases from districts of Abbottabad and Kashmir where no shrine elite was ever elected, while 75-100 percentile contain cases from Multan and Sukkur where largest number of shrine elites were elected throughout our sample period. The dependent variable is State Wins and Shrine Elite Wins case in Panel A and B, respectively.

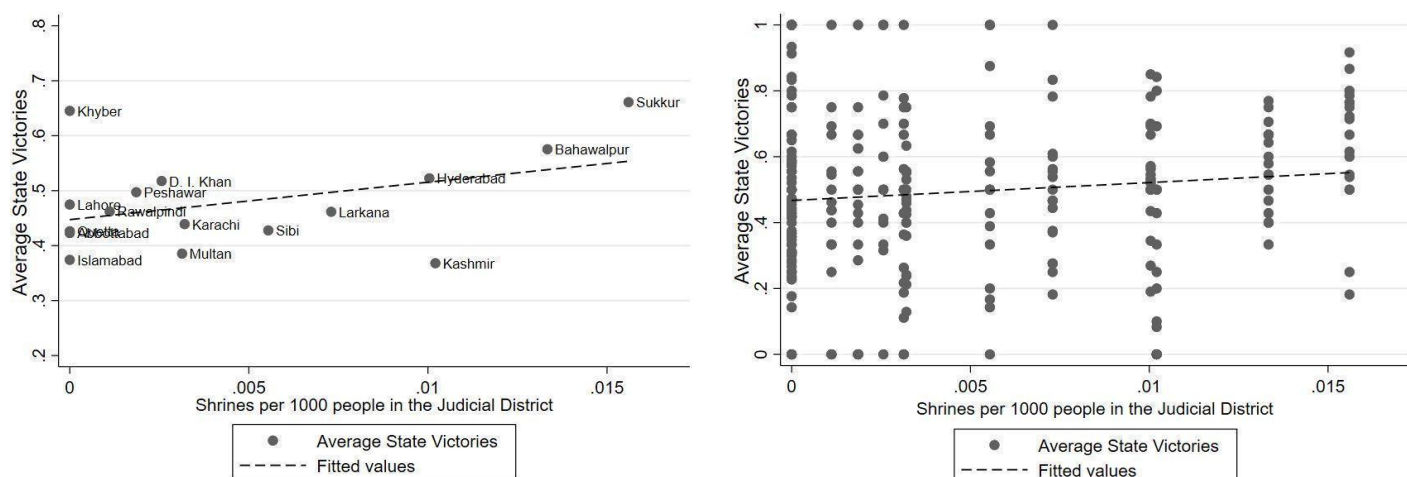


**Figure 6: Shrines and Average State Wins Before and After the Coup**

**Panel A: Shrines and Average State Wins Before Coup (1986-1998)**



**Panel B: Shrines and Average State Wins After Coup (1999-2016)**



Note: The Figure on the left averages State Wins by the district over all years; 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 D.4 (Figure D4 and D5, for Case Delay and Merit, respectively).

Online Appendix to:

**Religious Leaders and Rule of Law**

*BY* SULTAN MEHMOOD AND AVNER SEROR

**Contents**

**A. Variable Definitions and sources**

**B. Theory Appendix: Proof of Proposition 1**

**C. Data Appendix: Additional information and data collection**

**D. Additional Figures and Tables**

## A. Variable Definitions and sources

**State Wins** = This is average government victories for a given judge. This variable was originally coded at the case level by a law firm, as 1 for a State victory and 0 for a State defeat. Coding was based on their reading of the judgment orders retrieved from an online portal that records the universe of High Court cases in Pakistan (<https://www.pakistanlawsite.com/>). More information on this source and data construction can be found in Appendix B.3.

**Merit** = This is average merit decisions for a given judge. This variable was also originally coded at the case level by the law firm, based on judgment orders. It is a dummy for the case being decided based on “*evidence rather than technical or procedural grounds*” (Pound, 1963).

**Case Delay** = This is average case delay for a given judge. It is difference between case filing and decision year.

**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 as follows: 
$$\text{Shrine Density} = \frac{\text{Number of Shrines in the Judicial District}}{\text{Total Population in the Judicial District}} \times 1000.$$

**Shrine Elite** = It is the number of shrine leaders elected to office in the judicial district. We sum over all local electoral districts within the jurisdiction of the district High Court. This data is obtained from officials results released by Election Commission of Pakistan.

**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.

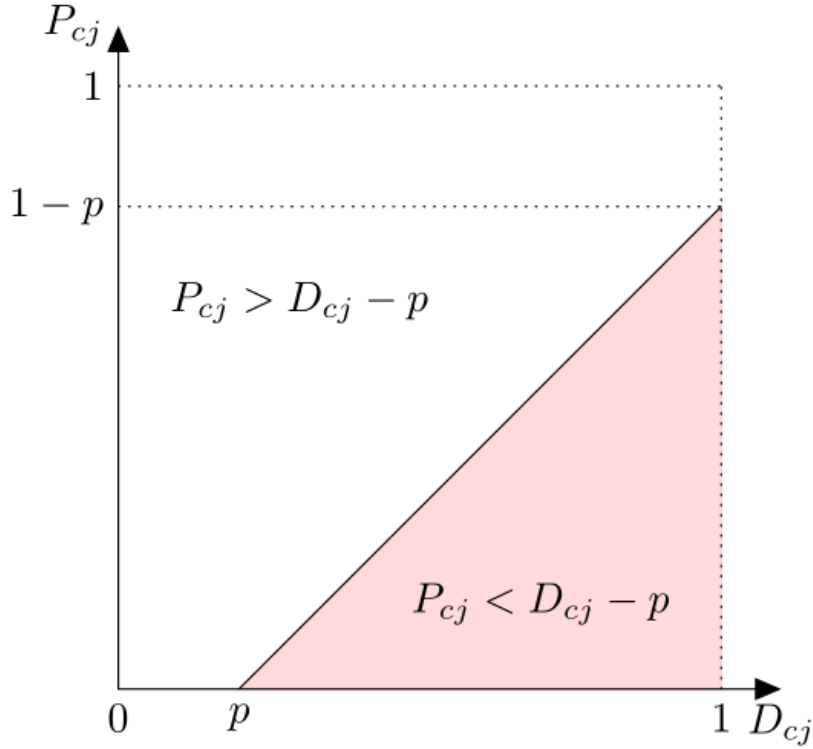
**Area** = It is the area (in square kilometres) of the district where the high court is located. This is obtained from a linear interpolation of 1998 and 2017 census of Pakistan.

**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.

## B. Theory Appendix: Proof of Proposition 1

First, we demonstrate that  $SW(p) = \frac{1}{2} + p(1 - \frac{p}{2})$ . Indeed, judge  $j$  rules in favor of the state in a judicial case  $c$  when  $P_{cj} > D_{cj} - p$ . Hence, given that  $P_{cj}$  and  $D_{cj}$  are drawn from uniform distributions which support is  $[0,1]$ , the likelihood that the state wins a judicial case is equal to the white area in figure B.1. It is then direct from figure B.1 that  $SW(p) = 1 - \frac{1}{2}(1 - p)^2 = \frac{1}{2} + p(1 - \frac{p}{2})$ . Applying the Law of Large numbers,  $SW(p)$  is also the share of cases won by the State.

**Figure B1. Determination of the share of judicial cases won by the State**



Second, we show that the likelihood that candidate  $i$  wins the election can be expressed as

follows:  $\pi(p_i, p_{-i}) = \frac{(\theta_i - \eta p_i)^k}{\sum_{j \in N} (\theta_j - \eta p_j)^k}$ . The probability that voter  $v$  chooses candidate  $i$  is:

$$P_i = \Pr(v(i, v) > v(j, v) \text{ for any } j \in N \setminus i). \quad (\text{B.1})$$

We denote  $x_{iv} = \log(\epsilon_{iv})$ ,  $x_i = \log(\epsilon_i)$  and  $v_i = \theta_i - \eta p_i$ . Given that  $\epsilon_{iv}$  and  $\epsilon_i$  are drawn from the Gumbel distribution  $G(\cdot)$ ,  $x_{iv}$  and  $x_i$  are drawn from a Fréchet distribution, which c.d.f is  $F(x) = e^{-x^{-k}}$ . We deduce that

$$P_i = \Pr(v_i x_i x_{iv} > v_j x_j x_{jv} \text{ for any } j \in N \setminus i), \quad (\text{B.2})$$

So

$$P_i = \int_0^\infty \prod_{j \in N \setminus i} F\left(\frac{v_i x_i}{v_j x_j} x_{iv}\right) dF(x_{iv}),$$

$$P_i = \int_0^\infty \exp\left(-\left[\frac{v_i x_i}{v_j x_j} x_{iv}\right]^{-k}\right) d[\exp(-x_{iv}^{-k})].$$

We find that

$$P_i = \int_0^\infty \exp\left(-x_{iv}^{-k} \left[\frac{\sum_{j \in N} (v_j x_j)^k}{(v_i x_i)^k} - 1\right]\right) d[\exp(-x_{iv}^{-k})], \quad (\text{A.3})$$

With  $\mu = \frac{\sum_{j \in N} (v_j x_j)^k}{(v_i x_i)^k}$  and the change of variable  $u = \exp(-x_{iv}^{-k})$ ,

$$P_i = \int_0^1 u^{\mu-1} du = \frac{1}{\mu}$$

Applying the Law of large numbers, we deduce that the vote share of candidate  $i$  is

$$P_i = \frac{(v_i x_i)^k}{\sum_{j \in N} (v_j x_j)^k}. \quad (\text{B.4})$$

The probability that candidate  $i$  wins, denoted  $\pi(p_i, p_{-i})$ , is then:

$$\pi(p_i, p_{-i}) = \Pr\left(\frac{(v_i x_i)^k}{\sum_{j \in N} (v_j x_j)^k} > \frac{(v_l x_l)^k}{\sum_{j \in N} (v_j x_j)^k} \text{ for any } l \neq i\right). \quad (\text{B.5})$$

We find that

$$\pi(p_i, p_{-i}) = \frac{v_i^k}{\sum_{j \in N} (v_j)^k}. \quad (\text{B.6})$$

We are now able to demonstrate Proposition 1. We will first characterize the equilibrium and determine the optimal level of influence  $p_i^*$  exerted by each candidate  $i$  and the endogenous number of religious candidates  $N_r^*$  and secular candidates  $N_s^*$ .

First, we determine  $p_i^*$ . The first-order condition associated with the determination of  $p_i^*$  is:

$$-\phi'(p_i) + \pi(p_i, p_{-i}) \left\{ -\frac{\eta k}{\theta_i - \eta p_i} (1 - \pi(p_i, p_{-i})) p_i \left(1 - \frac{p_i}{2}\right) + 1 - p_i \right\} = 0, \quad (\text{B.6})$$

which admits a unique interior solution, as the second-order derivative of  $w_i(p_i, p_{-i})$  with respect to  $p_i$  is negative:

$$\begin{aligned}
\frac{\partial^2 w_i(p_i, p_{-i})}{\partial p_i^2} &= -\phi''(p_i) \\
&+ \frac{\partial \pi(p_i, p_{-i})}{\partial p_i} \left\{ -\frac{\eta k}{\theta_i - \eta p_i} (1 - \pi(p_i, p_{-i})) p_i \left(1 - \frac{p_i}{2}\right) + 1 - p_i \right\} \\
&+ \pi_i(p_i, p_{-i}) \left\{ \frac{-\eta^2 k}{(\theta_i - \eta p_i)^2} (1 - \pi(p_i, p_{-i})) p_i \left(1 - \frac{p_i}{2}\right) \right. \\
&\quad \left. - \frac{\eta k}{\theta_i - \eta p_i} \left[ (1 - \pi(p_i, p_{-i}))(1 - p_i) - \frac{\partial \pi(p_i, p_{-i})}{\partial p_i} p_i \left(1 - \frac{p_i}{2}\right) \right] - 1 \right\} \\
&< 0,
\end{aligned}$$

as  $\frac{\partial \pi(p_i, p_{-i})}{\partial p_i} < 0$ .

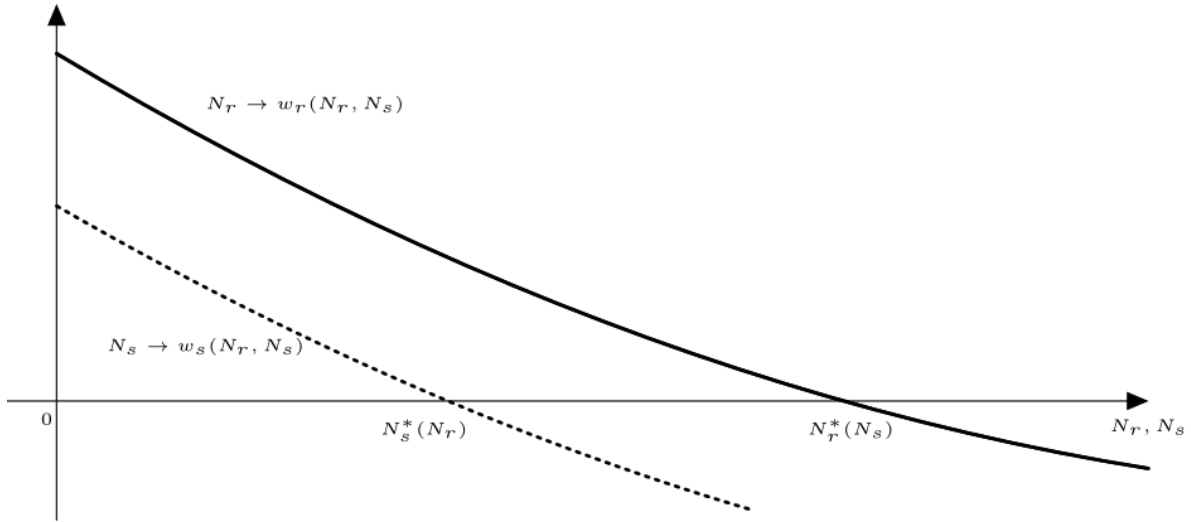
We denote  $p_i^*(N_r, N_s)$  the political influence exerted by candidate  $i$  in equilibrium. Substituting  $p_i^*(N_r, N_s)$  and  $p_{-i}^*(N_r, N_s)$  in the utility of candidate  $i$  and applying the envelope theorem, we deduce that the indirect utility of candidate  $i$ , which we denote  $w_i(N_r, N_s)$ , is (i) increasing in  $\theta_i$  and (ii) decreasing in both  $N_r$  and  $N_s$ .

Given the free entry condition, the number of candidates  $N_r^*$  and  $N_s^*$  are obtained from the following conditions:  $w_r(N_r^*, N_s^*) = 0$  and  $w_s(N_r^*, N_s^*) = 0$ . Indeed, with a slight abuse of notations, we consider  $N_r^*$  and  $N_s^*$  as continuous variables.<sup>59</sup> We have represented  $w_r(N_r, N_s)$  as a function of  $N_r$ , and  $w_s(N_r, N_s)$  as a function of  $N_s$  in Figure B.2. The intersection of the curve  $N_r \rightarrow w_r(N_r, N_s)$  with the horizontal line defines a decreasing locus  $N_r^*(N_s)$ . Similarly, the intersection of the curve  $N_s \rightarrow w_s(N_r, N_s)$  with the horizontal line defines a decreasing locus  $N_s^*(N_r)$ . In this setting, we demonstrate that there exists only one equilibrium when we characterize more precisely the variation of the two loci below. Before providing this final step of the proof of the uniqueness of the equilibrium, we demonstrate the following claims:

---

<sup>59</sup> If we were to consider  $N_r^*$  and  $N_s^*$  as integers, then the free entry conditions would write  $w_r(N_r^*, N_s^*) \geq 0 > w_r(N_r^* + 1, N_s^*)$  and  $w_s(N_r^*, N_s^*) \geq 0 > w_s(N_r^*, N_s^* + 1)$ .

**Figure B2. Determination of the loci  $N_r \rightarrow N_s^*(N_r)$  and  $N_s \rightarrow N_r^*(N_s)$ .**



- *Upon being elected, politicians with religious credentials exert more influence on judges.*

The first-order condition (B.6) for  $i = r$  implicitly defines an increasing function  $p_s \rightarrow p_r^*(p_s)$ , which is the best-response of a religious candidate to the policy implemented by a secular candidate. Similarly, (B.6) for  $i = s$  implicitly defines an increasing function  $p_r \rightarrow p_s^*(p_r)$ , which corresponds to the best-response of a secular candidate to the policy implemented by a religious candidate.

Fixing the political influences exerted by a candidate  $i$ 's challengers, and given the first-order condition (B.6), it is always true that for any given values of  $N_s$  and  $N_r$ ,

$$\frac{\partial w_r(p_i, p_{-i})}{\partial p_i} > \frac{\partial w_s(p_i, p_{-i})}{\partial p_i}$$

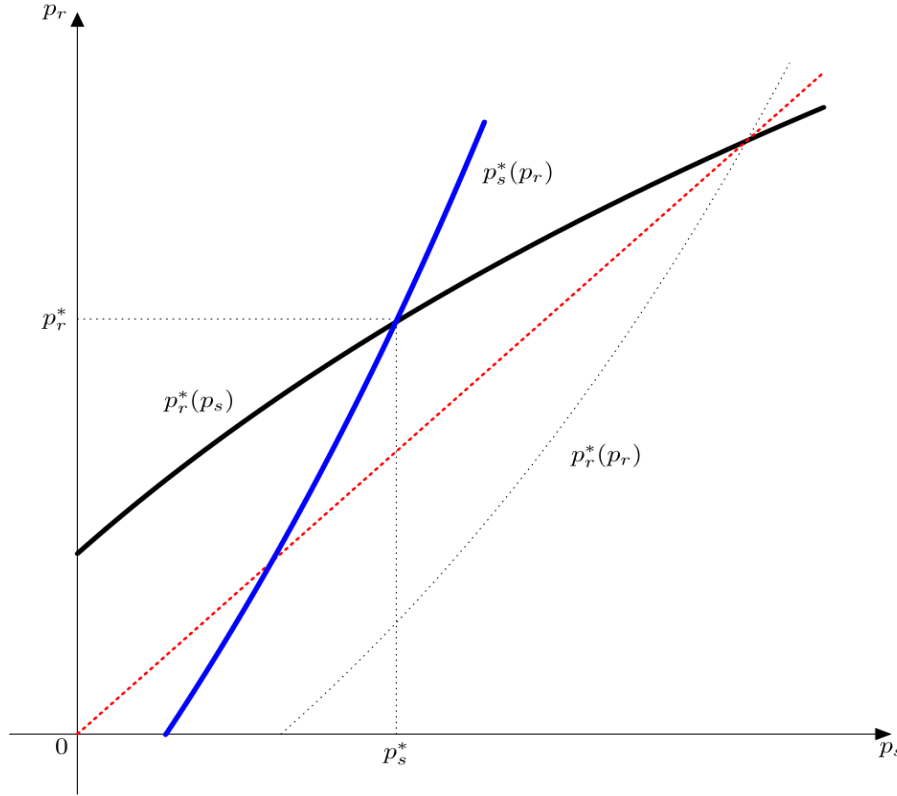
for any  $p_i \in [0,1]$  and  $p_{-i} \in [0,1]^{N-1}$ .

This implies that the functions  $p \rightarrow p_r^*(p)$  and  $p \rightarrow p_s^*(p)$  previously defines are necessarily such that  $p_s^*(p) < p_r^*(p)$  for any  $p \in [0,1]$ .

We have represented in Figure B.3 the determination of the equilibrium levels of influence at the intersection of the two best-response functions. From the figure, given that  $p_s^*(p_r) < p_r^*(p_r)$  for any  $p_r \in [0,1]$ , the blue curve representing  $p \rightarrow p_s^*(p)$  is necessarily on the left of the dotted black curve representing  $p \rightarrow p_r^*(p)$ . Hence, by symmetry, the intersection of the loci is necessarily above the 45° line, which means that  $p_s^* < p_r^*$ . Hence, candidates with religious credentials exert more influence on judges than their secular counterparts.



Figure B3. Equilibrium levels of influence



- **Politicians with religious credentials have a higher likelihood of winning.**

Given (B.6), we deduce that a candidate with religious credentials have a higher likelihood of winning the election when  $\theta_r - \eta p_r^* > \theta_s - \eta p_s^*$ . Assume that  $\theta_r - \eta p_r^* = \theta_s - \eta p_s^*$ . Then,

$$\frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}^*) = -\phi'(p_r^*) + \frac{1}{N} \left\{ p_r^* - \frac{\eta k}{\theta_r - \eta p_r^*} \left( 1 - \frac{1}{N} \right) \right\},$$

with  $p_{-r}^*$  the vector of policies where the challengers of a candidate with religious credentials do either  $p_r^*$  if they have religious credentials, or  $p_s^*$  otherwise. Similarly,

$$\frac{\partial w_s}{\partial p_s}(p_s^*, p_{-s}^*) = -\phi'(p_s^*) + \frac{1}{N} \left\{ p_s^* - \frac{\eta k}{\theta_s - \eta p_s^*} \left( 1 - \frac{1}{N} \right) \right\}.$$

with  $p_{-s}^*$  the vector where the challengers of a candidate without religious credentials do either  $p_r^*$  if they have religious credentials, or  $p_s^*$  otherwise. Hence,

$$\frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}^*) - \frac{\partial w_s}{\partial p_s}(p_s^*, p_{-s}^*) = -\{\phi'(p_r^*) - \phi'(p_s^*)\} + \frac{1}{N} \{p_r^* - p_s^*\} < 0,$$

if the function  $\phi(\cdot)$  is sufficiently convex (as  $p_s^* < p_r^*$ ), which we assume true. For instance, the standard specification  $\phi(p) = \frac{p^2}{2}$  suffices for the previous inequality to be satisfied as long as  $N > 1$ . This implies that an equilibrium such that  $\theta_r - \eta p_r^* = \theta_s - \eta p_s^*$  cannot exist, as both

first-order conditions cannot be simultaneously satisfied, for any number of religious and secular candidates  $N_r$  and  $N_s$ .

Similarly, assume that  $\theta_r - \eta p_r^* < \theta_s - \eta p_s^*$ , which rewrites  $p_s^* < \frac{\theta_s - \theta_r}{\eta} + p_r^* = p_s^A$ . Then,

$$\frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}(p_s^A)) = -\phi'(p_r^*) + \frac{1}{N} \left\{ p_r^* - \frac{\eta k}{\theta_r - \eta p_r^*} \left( 1 - \frac{1}{N} \right) \right\},$$

with  $p_{-r}(p_s^A)$  the vector of policies of the challengers of a candidate with religious credentials such that the challengers with religious credential do  $p_r^*$ , while those without do  $p_s^A$ .

As  $\frac{\partial^2 w_r}{\partial p_s \partial p_r}(p_r^*, p_{-r}(p_s)) > 0$  and  $p_s^* < p_s^A$ , we deduce that

$$\frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}(p_s^*)) < \frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}(p_s^A)).$$

Furthermore, as  $p_s^* < p_s^A$ ,

$$\frac{\partial w_s}{\partial p_s}(p_s^*, p_{-s}(p_r^*)) > -\phi'(p_s^A) + \frac{1}{N} \left\{ p_s^A - \frac{\eta k}{\theta_s - \eta p_s^A} \left( 1 - \frac{1}{N} \right) \right\},$$

because  $w_s(p_s^*, p_{-s}(p_r^*))$  is concave in the platform chosen by the candidates without religious credentials  $p_s^*$ .<sup>60</sup> Combining the preceding inequalities, we deduce that

$$\frac{\partial w_r}{\partial p_r}(p_r^*, p_{-r}(p_s^*)) - \frac{\partial w_s}{\partial p_s}(p_s^*, p_{-s}(p_r^*)) < -\{\phi'(p_r^*) - \phi'(p_s^A)\} + \frac{1}{N} \{p_r^* - p_s^A\} < 0.$$

An equilibrium such that  $\theta_r - \eta p_r^* < \theta_s - \eta p_s^*$  cannot exist. We have demonstrated that  $\theta_r - \eta p_r^* > \theta_s - \eta p_s^*$  is necessarily verified in equilibrium, so politicians with religious credentials have a higher likelihood of winning.

- ***Politicians with religious credentials have a higher likelihood of running.***

As represented in figure B.2 above, the loci  $N \rightarrow N_r^*(N)$  and  $N \rightarrow N_s^*(N)$  are necessarily such that  $N_s^*(N) < N_r^*(N)$  for any  $N$ .

---

<sup>60</sup>  $w_{ps^*}(p_r^*, p_{-r}(p_s^*))$  is concave in  $p_s^*$ , as:

$$2w_{ps^*}(p_r^*, p_{-r}(p_s^*))p_{s^*}^2 = -\phi''(p_s^*) + \frac{2\eta k}{(\theta_s - \eta p_s^*)^3} p_{s^*}^2 - \frac{2\eta k}{(\theta_s - \eta p_s^*)^2} p_{s^*} + \frac{2\eta k}{(\theta_s - \eta p_s^*)} - \frac{2\eta k}{(\theta_s - \eta p_s^*)^2} p_{s^*}^2 - \frac{2\eta k}{(\theta_s - \eta p_s^*)^3} p_{s^*}^3 < 0.$$

Furthermore, as the locus  $N_s \rightarrow N_r^*(N_s)$  is implicitly defined by the equation  $w_r(N_r^*, N_s) = 0$ , we find that

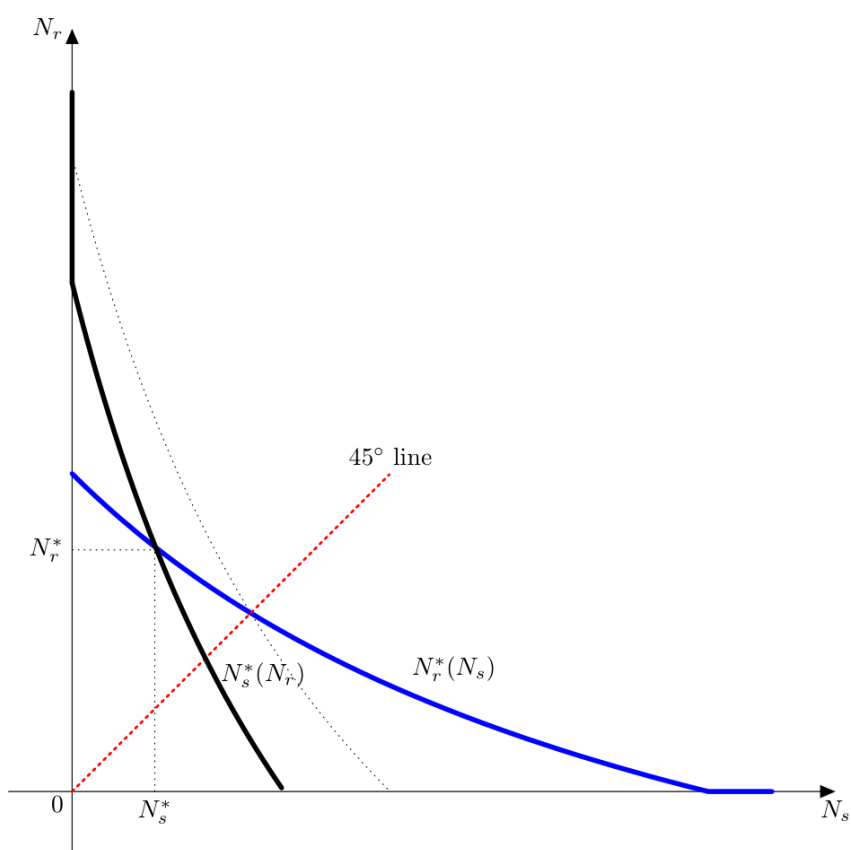
$$\frac{\partial w_r(N_r^*, N_s)}{\partial N_r} \frac{\partial N_r^*}{\partial N_s} + \frac{\partial w_r(N_r^*, N_s)}{\partial N_s} = 0,$$

from which we deduce that  $\frac{\partial N_r^*}{\partial N_s} > -1$  necessarily holds. Intuitively, an increase in the number of entrants with low legitimacy leads to a less than proportional exit from candidates with high legitimacy. Given this important property, we are finally able to draw the determination of the equilibrium number of entrants with and without religious credentials. Figure B.4. presents the result. The blue curve represents the locus  $N_s \rightarrow N_r^*(N_s)$ , and has a negative slope strictly above -1. The black curve represents the locus  $N_r \rightarrow N_s^*(N_r)$ , which, given that  $N_s^*(N) < N_r^*(N)$  for any  $N$ , is on the left of the dotted line that represents the function  $N_r \rightarrow N_r^*(N_r)$ . By symmetry of the problem and given that  $\frac{\partial N_r^*}{\partial N_s} > -1$ , there is only one intersection of the two loci: this concludes the proof that there is a unique Nash equilibrium with free entry.<sup>61</sup> Besides, by symmetry again, and given that  $\frac{\partial N_r^*}{\partial N_s} > -1$ , this equilibrium is necessarily such that  $N_s^* < N_r^*$ . This concludes the proof of Proposition 1.

---

<sup>61</sup> In the hypothetical case where  $N_r^* N_s < -1$ , drawing the two loci  $N_s \rightarrow N_r^*(N_s)$  and  $N_r \rightarrow N_s^*(N_r)$ , one can easily find that there will be three equilibria.

**Figure B4. Determination of the equilibrium number of candidates**



## **C. Data Appendix: Additional information and data collection**

### *C.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, 2017).

### *C.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 C.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 C.3 presents this information as plot of total cases sampled with total available cases.

### *C.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, 2020, 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>62</sup>

---

<sup>62</sup>For further information on the shrine dataset, see Malik and Mirza (2020).

## D. Additional Tables and Figures

**Table D1: Outcome Variables and Case Characteristics**

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
<i>Land Cases</i>	0.41	0.38	0.03	0.94
<i>HR Cases</i>	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 D2: Land Expropriated due to Shrines**

Panel A: Land Expropriations due to Shrines			
	(1)	(2)	(3)
(% GDP)	Average Value	Minimum Value	Maximum Value
Total Land Expropriated	0.375	0.099	0.587
Counterfactual: no Shrines	0.360	0.095	0.558
Land Expropriation Attributed to Shrines (Lower Bounds)	0.019	0.005	0.029
<b>Land Expropriation Attributed to Shrines (Upper Bound)</b>	0.062	0.026	0.087

Panel B: More details on Land Expropriation due to Shrines						
Year	Pakistan GDP (USD)	Total Land Expropriated (USD)	Total Land Expropriated (% GDP)	Counterfactual: No Shrines (% GDP)	Land Expropriated Attributed to Shrines (% GDP)	Land Expropriated Attributed to Shrines (% GDP) Upper Bound
1986 - 1989	35973590092	162750000	0.452415229	0.429794	0.022621	0.075403
1990 - 1993	46582553713	244000000	0.523801253	0.497611	0.02619	0.087300
1994 - 1997	59670725619	252500000	0.423155571	0.401998	0.021158	0.070527
1998 - 2001	71666989734	284600000	0.397114489	0.377259	0.019856	0.066187
2002 - 2005	99870126045	436125000	0.436692149	0.414858	0.021835	0.072783
2006 - 2009	156970091702	598200000	0.381091706	0.362037	0.019055	0.063517
2010 - 2012	121693012321	517500000	0.425250382	0.403988	0.021263	0.070877
2013 - 2015	248711862544	382500000	0.153792423	0.146103	0.00769	0.025633
2016	278654637738	503700000	0.180761391	0.171723	0.009038	0.030127

Note: Panel A shows the results of the back-of-the-envelope calculations. The minimum value expropriated is for the year 2015, the maximum value is for the year 2005, while the average is the yearly average for our sample period of 1986-2016. Our computations suggest that shrines allowed government to expropriate *additional* land worth 0.005 to 0.03 percent of GDP (average: 0.029 percent of GDP). Our conservative or lower bound estimates are computed from using the fact that 30% of land expropriation do not involve productive investments (Siddique, 2013). Upper bound estimates do not discount the value of land expropriated by 30% using this available survey.



**Table D3: Balance Test - Impact of Shrine Density X Coup on Case and Judge Characteristics**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Constitut ional Case	Land Case	Human Rights Case	# Lawyers on Case	# Judges on Case	CJ on Bench.	Office Holder Bar	Former Lawyer	Promot ed to SC	Gender
Shrines Density at 1911 X Coup 1999	-0.998 [2.562]	-3.290 [2.599]	2.712 [3.837]	7.816 [25.22]	-4.588 [5.125]	1.753 [1.002]	-0.0301 [2.625]	1.365 [2.413]	-0.178 [1.080]	0.412 [0.847]
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,439	7,439	7,439	7,439	7,439	7,439	7,439	7,439	7,439	7,439
R-squared	0.192	0.118	0.061	0.029	0.071	0.015	0.054	0.019	0.019	0.024

Robust standard errors clustered at district level appear in brackets. The dependent variables are case and judge characteristics. In particular, they are dummies for constitutional case (1), land case (2), human rights case (3), number of lawyers on a case (4), number of judges on a case (5), dummy for CJ on bench (6), judge being an office holder in bar association prior to appointment (7), judge being former lawyer (8), promoted to Supreme Court (9) and Gender of the judge (10). Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table D4: Robustness to excluding different Quantiles of Shrine Density Districts**

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 X Coup 1999	14.73*** [2.623]	13.15*** [3.040]	13.23*** [3.167]	11.74*** [2.583]
District and Year Fixed Effects	Yes	Yes	Yes	Yes
District, Case and Judge Controls	Yes	Yes	Yes	Yes
Excluding top and bottom 6.25 Percentiles	Yes	Yes	Yes	Yes
Excluding top and bottom 12.5 Percentiles	No	Yes	Yes	Yes
Excluding top and bottom 18.75 Percentiles	No	No	Yes	Yes
Excluding top and bottom 25 Percentiles	No	No	No	Yes
Observations	6,661	5,884	5,496	3,962
R-squared	0.051	0.051	0.043	0.054
Mean Dep. Variable	0.487	0.491	0.497	0.484

Robust standard errors appear in brackets (clustered at the district level). The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1 as well as their interactions with the post-coup dummy. The case controls also include case-type fixed effects. The first column drops bottom and top 6.25 percentiles of shrine districts i.e. Khyber and Sukkur, respectively. The second column drops bottom and top 12.5 percentile districts (Khyber, Sukkur, Abbottabad, Islamabad), i.e. 25% of the sample districts (4/16). The third column drops bottom and top 18.75 percentiles and hence 37.5% of the sample districts (6/16), specifically, the following districts are dropped in this case: Khyber, Sukkur, Abbottabad, Islamabad, Kashmir and Islamabad, while the fourth column further drops Hyderabad and Lahore and hence 50% of the districts (8/16 districts). \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table D5: Case Lag and Merit - Robustness - Alternative Reform, Outliers and Dataset**

VARIABLES	17 <sup>th</sup> 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 Coup 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 17 <sup>th</sup> Amendment	20.51 [32.46]	5.246* [2.951]				
Shrine Density 1911 X Outliers Excluded			-1.496	5.646		
X Coup 1999			[24.64]	[4.702]		
Shrine Density 1911 X Colonial Gazette					-17.67 [26.50]	1.173 [4.798]
District and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
District, Case and 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 clustered at the district level. Dependent variable is case delay, the time it takes for the case to be decided relative to the filing year, and decisions on Merit, this is a dummy variable that switches on if the case is ruled on evidence or merits of the case, relative to a technicality. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table D6: Impact of Shrine Density on State Wins – Robustness to Alternative Clustering**

	(1)	(2)	(3)	(4)
	<i>State Wins</i>			
Shrine Density 1911 X Coup 1999	9.318** {3.663} (2.413)	9.693** {3.974} (2.858)	9.566** {3.938} (2.850)	9.654** {3.900} (2.859)
District and 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 Dep. Variable	0.502	0.502	0.502	0.502

Two-way clustering due to Cameron et al. (2012) appear in curly brackets and bootstrapped standard errors with 1000 repetitions appear in parenthesis. p-values and confidence intervals associated with wild cluster bootstrap due to Cameron et al. (2008) is presented in Figure D6. The dependent variable is State Wins, a dummy variable for the case being ruled in favor of the State. Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table D7: Impact of Shrines on Case Filing**

	(1)	(2)	(3)
	Total Filed	Constitutional Filed	Criminal Filed
Shrine Density 1931 X Coup 1999	4,808 [34,919]	-2,487 [23,393]	7,295 [12,034]
District and Year Fixed Effects	Yes	Yes	Yes
District Case and Judge Controls	Yes	Yes	Yes
Observations	7,439	7,439	7,439
R-squared	0.099	0.095	0.099

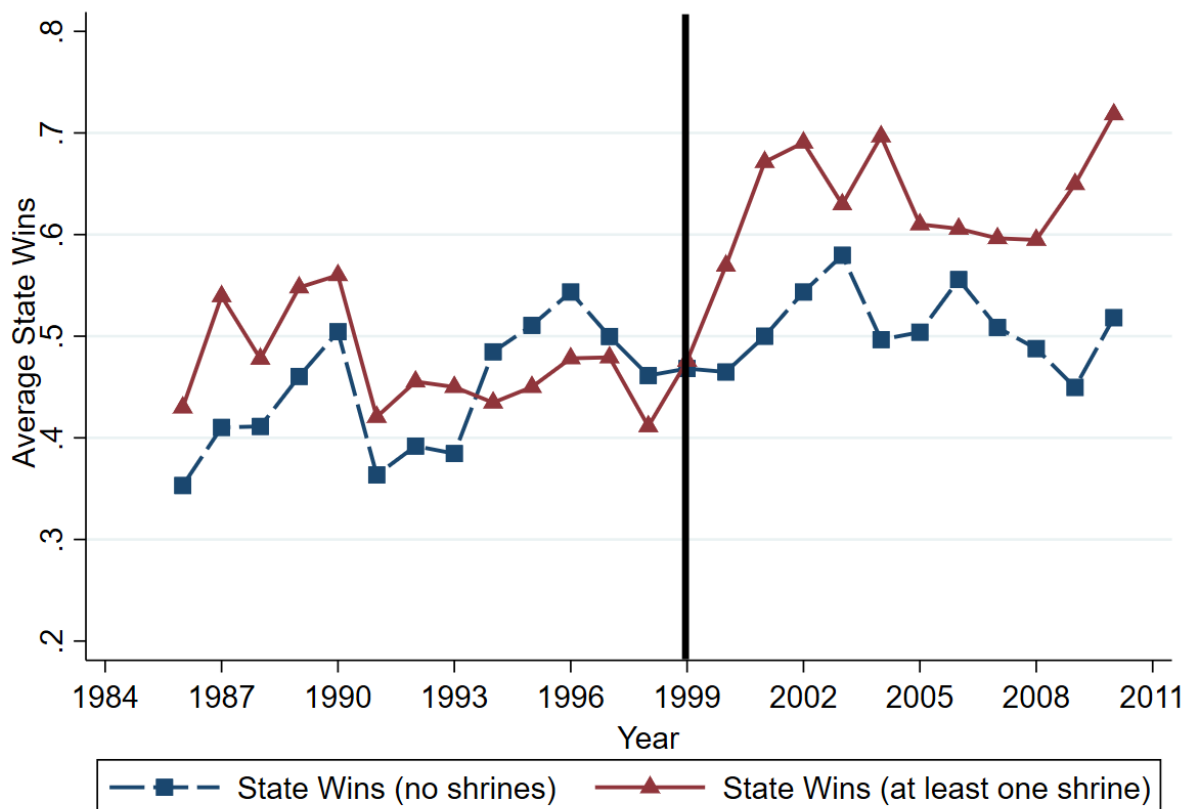
Robust standard errors appear in brackets (clustered at the district level). The dependent variable is total cases filed in column (1), total criminal cases filed in column (2) and total criminal cases filed in column (3). Shrine Density is the number of shrines per 1000 people. Coup 1999 is a dummy that switches on in the coup year of 1999. The controls include all district, case and judge characteristics shown in Table 1. The case controls also include case-type fixed effects. Similar results are found when we aggregate dependent and independent variables at the district-year level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Figure D1: The Shrine of Bahauddin Zakariya (left) with Trusty of the Shrine (right)**



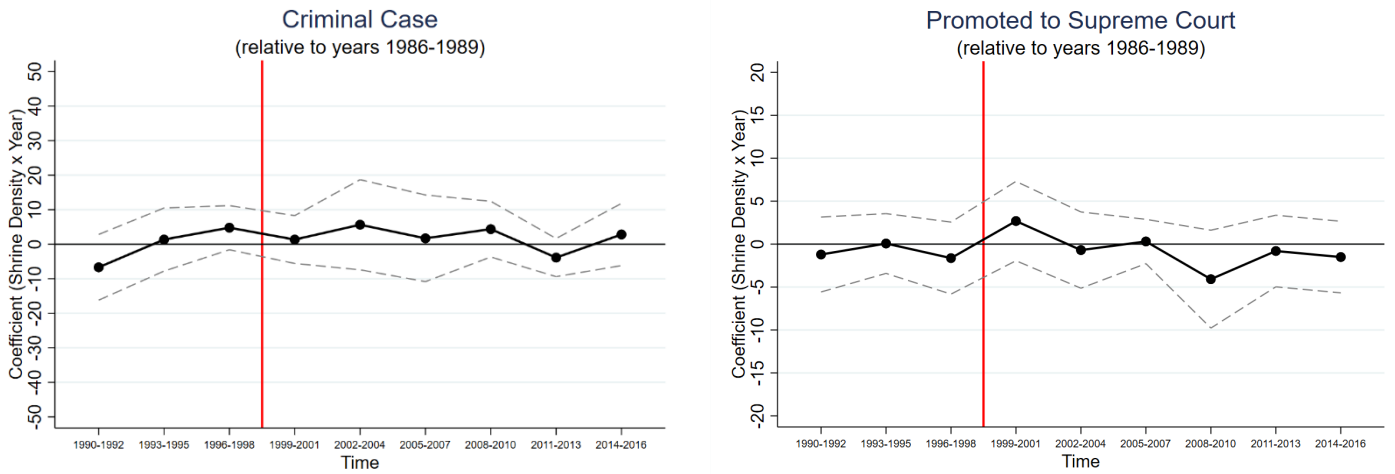
Note: The person in white turban “giving blessings” to the child on the right is a prominent shrine elite (Shah Mehmood Qureshi) and current foreign minister of Pakistan. He is shrine leader of Bahauddin Zakariya Shrine of Multan pictured on the left.

**Figure D2: Evolution of State Wins over Time**

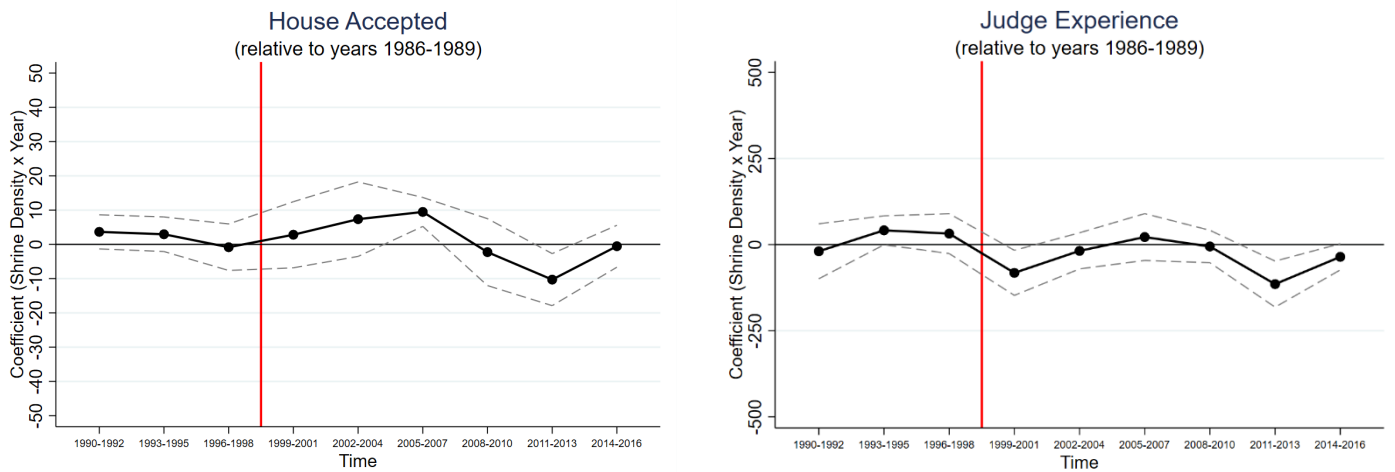


Note: The Figure presents average State Wins, over time, for districts where there are no shrines as recorded in the British Colonial Gazettes (districts of Abbottabad, Islamabad, Lahore and Khyber) and average State Wins plot of all remaining districts with at least one shrine. Vertical line at 1999 reflect timing of the military coup.

**Figure D3: Additional Potentially Confounding Interactions with the Coup**  
Panel A: Case Characteristics (Criminal Case and Promoted to Supreme Court)



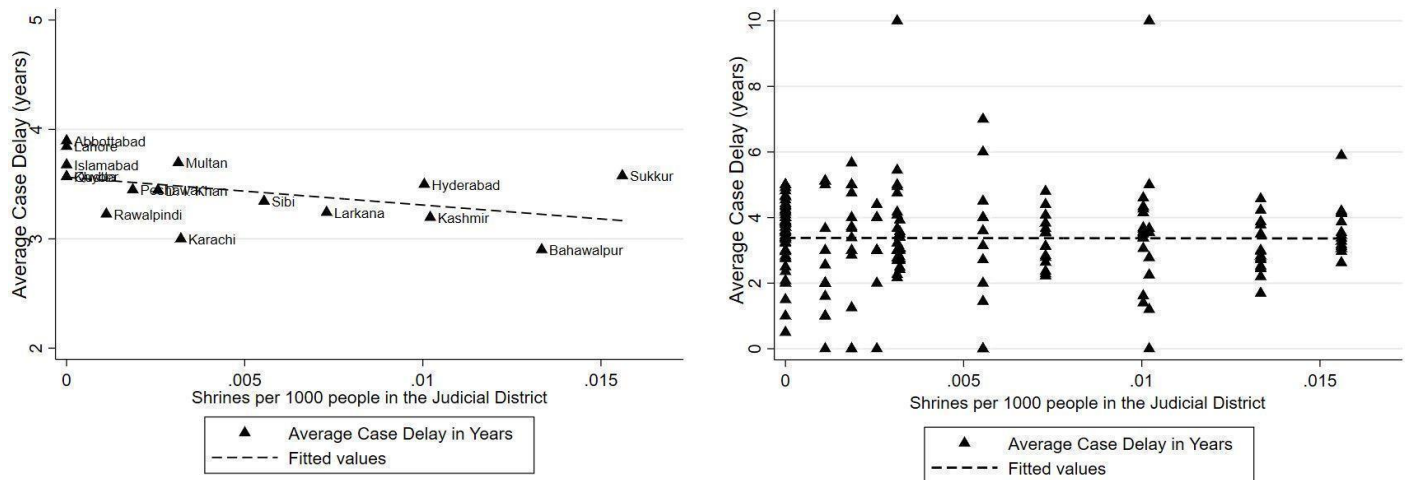
**Panel B: Judge Characteristics (House Accepted and Judge Experience)**



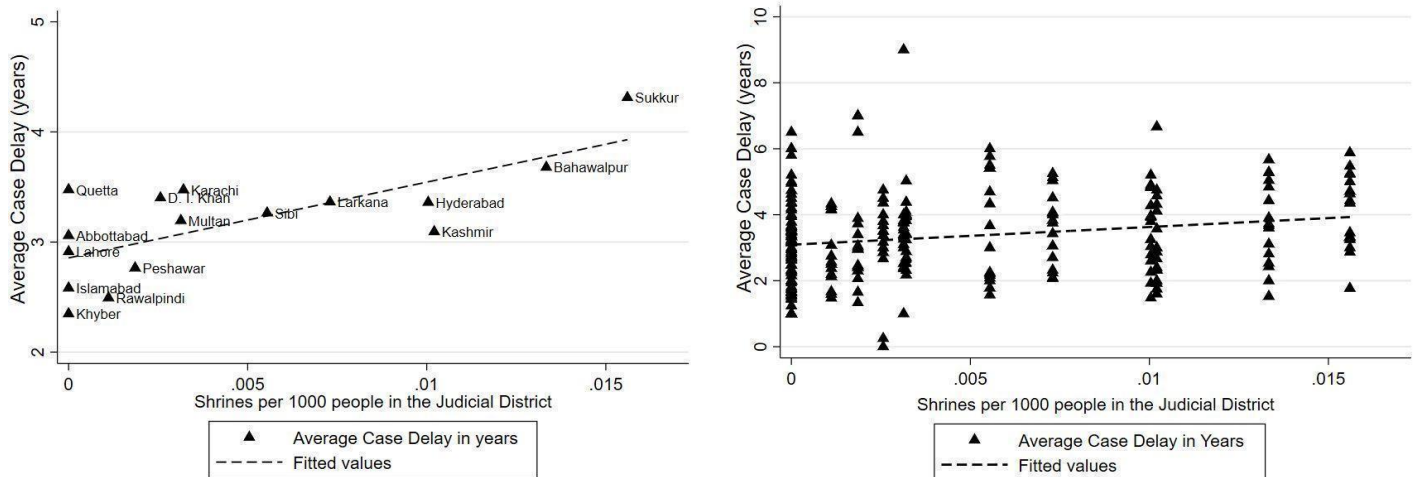
Note: The Figure presents coefficients and the corresponding 90% confidence intervals in the regressions of case or judge characteristics on 2-year interval dummies interacted with shrine density in the district together with case, judge and district controls as well as district and year fixed effects. 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 such as case having chief justice on bench, number of pages of judgment order, gender, religion of the judge are available on request.

**Figure D4: Shrines and Average Case Delay Before and After the Coup**

**Panel A: Shrines and Average Case Delay Before Coup (1986-1998)**



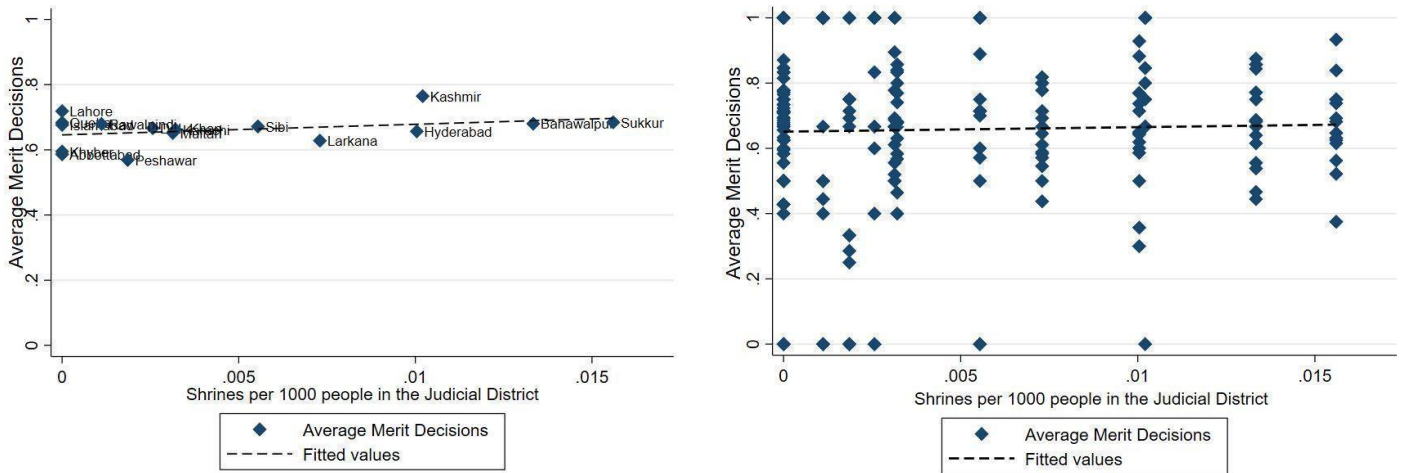
**Panel B: Shrines and Average Case Delay After Coup (1999-2016)**



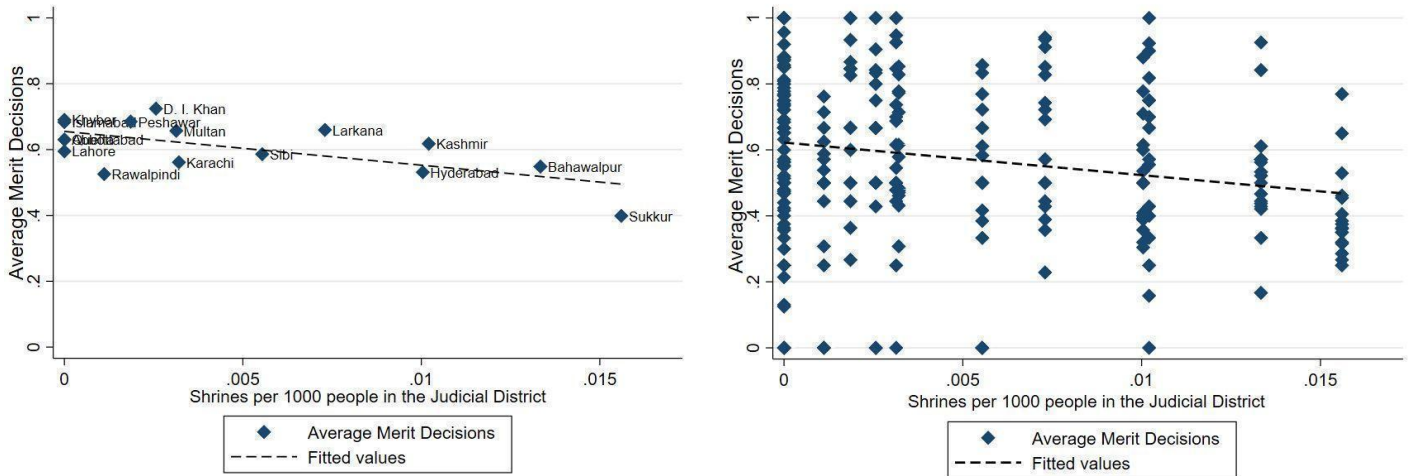
Note: The Figures on the left averages Case Delay by district, whereas, the Figures on the right averages by district-year.

**Figure D5: Shrines and Average Merit Before and After the Coup**

**Panel A: Shrines and Average Merit Before Coup (1986-1998)**



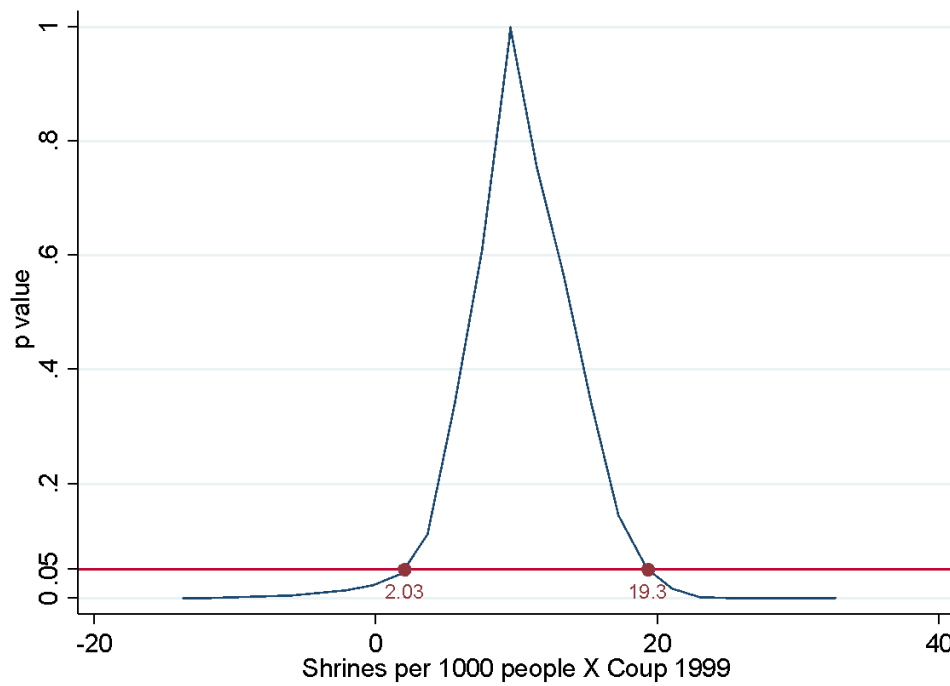
**Panel B: Shrines and Average Merit After Coup (1999-2016)**



Note: The Figures on the left averages Merit by district, whereas, the Figures on the right averages by district-year.



**Figure D6: Wild Bootstrap due to Cameron et al (2008)**



Note: The figure computes p-values and confidence intervals using wild cluster bootstrap due to Cameron et al. (2008) for small number of clusters. We present here our baseline specification that estimated in Table 2, column 4 i.e. the specification that includes year and district fixed effects as well as district, case and judge controls. Similar results are found for specifications corresponding to columns 1, 2 and 3 in Table 2. These additional robustness tests are available on request.