Judiciary's Achilles Heel: Executive Control via Appointment Power

BY SULTAN MEHMOOD*

11th August 2018

To what extent does the selection mechanism of the judges impact judicial decision making? We document a substantial increase in judicial independence and reduced case delay in Pakistan, as a result of a 2010 judicial selection reform which changed the selection procedure of the judges from the presidential appointment of the judges to the selection of judges by a judicial commission (consisting of peer judges). Using mandatory retirement age as an instrument for new appointments, we estimate the causal effect of the change in appointment procedure on judicial independence and case delay. Better enforcement of laws regulating land disputes with government agencies is a key mechanism driving these results. We further show that the judges selected by the judicial commission are significantly less likely to be politically active prior to their appointments or receive the controversial "Prime Minister's Assistance Package" (that awards residential plots to the judges) compared to the judges appointed by the president. (JEL 017, K40, P37)

Keywords: executive constraints, selection effects, institutions, courts, corruption

^{*}University of Paris-Dauphine, PSL, DIAL, LEDa (email: sultan.mehmood@dauphine.fr I would like to thank Advocate Javed Arshad, senior member of Lahore High Court Bar Association, for his detailed responses to my inquiries about the specifics of the Pakistani judicial system, Professor Ekaterina Zhuravskaya for her detailed comments and Abhijeet Banerjee, Thomas Piketty, Esther Dulfo, Prashant Bharadwaj, Dany Bahar, Dina Pomeranz, Rachel Kranton, Anandi Mani, Susan Rose-Ackerman, Eric Brosseau, Federica Carugati and Daniel Chen and participants at the PSE Applied Economics Seminar 2017, Oxford CSAE 2018 and ALEA 2018 for their comments and feedback on the paper. Financial support from Chair Governance and Regulation Lab, DIAL, PSL and University of Paris-Dauphine is acknowledged.

"The aim of every political Constitution, is or ought to be, first to obtain for rulers men who possess most wisdom to discern, and most virtue to pursue, the common good of society".

(Madison, Hamilton, and Jay (1788) in The Federalist Papers)

"There is no liberty if the power of judging is not separated from the legislative and executive power."

[Montesquieu (1748) in *l'Esprit des Lois*]

"A judiciary's job is to interpret the law not to challenge the administration."

[President Ziaul Haq (1982) in Amnesty International Report]

I. Introduction

In many countries of the world from the United States, Singapore to South Africa, the president appoints judges in the superior courts.¹ This is counterintuitive to the idea of "separation of powers" (Montesquieu, 1748). It is reasoned, however, that taking away the power of dismissal from the executive branch of the government or conversely the institution of "life-time appointment" or retirement only at a set mandatory age will be enough to curb executive control over the judiciary (Madison, Hamilton, and Jay 1788; Hayek 1960; Buchanan 1974; La Porta et al., 2004).

In this paper, we provide causal evidence that the institution of presidential appointment exerts considerable influence on judicial adjudication. In particular, we study a 2010 change in judge selection procedure in Pakistan. The reform changed the selection mechanism of the judges from

¹Or the president has significant involvement in the appointment process.

a system of presidential appointments similar to that in the United States to a judicial commission-based selection procedure (appointment by peer judges), similar to many European countries such as Sweden or Greece. Did this judicial selection reform have an impact on judicial outcomes and if so, what are the mechanisms driving this change?

Following this reform, many judgements reveal a change in judicial attitude towards the executive branch of the state in Pakistan (CLC; 2015; PLD, 2016; Asad, 2017; Haq, 2017).² For instance, in July of 2017, a Pakistani court took the unprecedented step to remove the incumbent executive head, the Prime Minister Nawaz Sharif, from office on account of his "undeclared assets" and "living beyond means" (Reuters, 2017).³ The "disqualification" of the Prime Minister, a business tycoon, and the leader of a party with two-third majority in the parliament, makes the judgement all the more noteworthy. Indeed, 4 of the 5 judges that adjudicated upon this case were selected under the new selection procedure. Likewise, in the April of 2018, Islamabad High Court removed the Foreign Minister from office where it was ruled that he "deliberately and wilfully not disclosed his status as an employee of the foreign company, nor receiving of the salary per month", while running for office.⁴ All three judges that handed down the unanimous verdict against the

²By executive we mean the organ of the state that *executes and enforces law* e.g. President's Office, Provincial, Federal and Provincial Ministers, Federal Governments and Government Agencies (a la Montesquieu, 1748).

³The court proceedings were started in 2015 when the "Panama Papers" scandal emerged. This consisted of 11.5 million leaked documents that detail ownership and financial information for more than 200,000 offshore companies. These document leaks found firms linked to Prime Minister Nawaz Sharif and his family.

⁴The judgement concludes that it was "obvious from the facts and circumstances in the instant case that the Respondent (Foreign Minister Khawaja Asif) had deliberately and wilfully not disclosed his status as an employee of the foreign company, nor receiving of the salary per month pursuant thereto ... working as an employee of the Company and receiving a substantial salary without being physically present, which is AED 50,000/- per month (USD 13, 600/- per month), were some benefits gained from non-disclosure. Disclosure would have led to giving the hefty salary paid by the Company for some advice sought telephonically by a foreign-based employer from the Foreign Minister of Pakistan. We have deeply pondered but could not persuade ourselves that this deliberate and wilful non-disclosure was a honest omission." (*The State vs Usman Dar*, reported in The News, 2018).

foreign minister were selected under the new selection procedure. This is in stark contrast to judgments involving individuals yielding executive authority, a few years earlier. For instance, "President may, in the larger public interest perform all legislative measures which are in accordance with, or could have been made under the Constitution, including the power to amend it."⁵

More typical cases with the government as a litigant in Pakistan involves land disputes with state agencies expropriating land or withholding payments (Property News Report, 2017).⁶ For instance, when the "Grievance of plaintiff was that despite completion of project, authorities had withheld his payments" the judge selected under the new selection procedure ruled that the government had "committed deliberate and wilful breach of the agreement" and ordered the government to "pay amount of balance outstanding of disputed running bill ... (and) pay damages." (*Altaf Hussain vs The State*, CLC, 2013, p. 284). This contrasts with decisions of many such cases prior to the reform. For example, in an earlier case, a similar "petition was dismissed" on a technicality (*Khalid Mohsin vs The State*, CLC, 2005, p. 745).

These examples are suggestive, but the aforementioned cases might differ in some unobserved characteristics. To systematically examine the influence of this reform on judicial decision making, we collect data on the district high courts of Pakistan from annual reports submitted to the Federal Ministry of Law, Justice and Human Rights, judicial administrative data from the Registrar Offices of district high courts, census data, bar council records, published case data in law journals of Pakistan and Public Accounts Committee (PAC) report on the list of judges

. .

⁵Tikka Khan vs The State in Pakistan Law Decisions Journal, 2008, p. 178.

⁶The government has been repeatedly accused and convicted of usurping upon private land through many notorious state agencies, chief among them are the Lahore Development Authority (LDA), Capital Development Authority (CDA) and Karachi Development Authority (KDA).

allotted residential land (through the Prime Minister Assistance Package). We combine information on 5035 cases from 1990 to 2016 with judge characteristics on 362 judges, across the district high courts of Pakistan.

We use two measures of judicial outcomes. To examine the executive influence over the judiciary, we construct a judicial dependence variable called "State Wins". This variable takes the value of 1 for "state victories" and 0 for "state losses" in a given case when the state is one of the parties. Judicial cases involving the government as a party in Pakistan cover a wide range of disputes, from simple commercial disputes to blasphemy, political victimization of opposition politicians, suppression of fundamental rights to the constitutionality of the military rules. Nevertheless, a substantial chunk of the petitions involving *The State* as a litigant involved land expropriation and ownership disputes with the government (about 30% of all petitions filed in high courts were of this nature). When government expropriates land, courts are generally the only recourse left for citizens to get back their property (La Porta et al., 2008). On November 29 2017, the Supreme court of Pakistan ordered Karachi Development Authority to return 35, 000 "encroachments" to their owners (The News, 2017). Similar instances of land expropriation cases by government agencies have been reported elsewhere in India, Ghana and China (BBC, 2013;

⁷ Following the literature, we ask law firms to code this variable (as in Djankov et al., 2003; La Porta et al., 2008). Law firms coded as 1 if the state 'won' and zero otherwise. Typically, cases in which the state won contained phrases such as "Case against the state is dismissed" and for cases were the state lost the judgment contained phrases like "Petition against the state is accepted" (for more details in the data section, appendices A and B).

⁸The petitions against the state have involved important cases around the world. See, for example, the case that challenged the apartheid government in South Africa, *The State vs Nelson Mandela* (1963), or the case that challenged bus segregation of African-Americans in the United States (*The State vs Martin Luther King*, 1956) or the case that invalidated laws prohibiting interracial marriages (Milred Loving vs The State, 1963). The study of executive constraints and judicial dependence in this context has "obvious value for securing ... political rights when the government is itself a litigant" La Porta et al. (2004, p. 447).

⁹By government we mean all levels of the administration that yield executive authority (i.e. local, provincial and federal government and public agencies, e.g., the various land development authorities).

Gadugah, 2017; Telegraph, 2017).¹⁰ Our second measure of judicial performance is the commonly used measure of court efficiency: case delay, i.e., the time it takes for a case to be decided relative to when it was filed (Djankov et al., 2003; La Porta et al, 2008; Voigt, 2016).

Figure 1 (Panel A) generalizes the anecdotal accounts of increased judicial independence following the 2010 reform to 5035 cases. We notice that prior to the reform (1990-2009), around 55% of cases were decided in favour of the state as opposed to about 40% of the cases after the reform (2010-2016). These differences are both qualitatively and statistically significant. A similar pattern emerges when we observe case delay data. In Figure 1 (Panel B), we observe that the case duration falls from an average of 4.5 years (1990-2009) to about 3 years (2010-2016).

Figure 1, however, cannot be interpreted as conclusive evidence of a causal link between the change in judicial selection procedure and judicial outcomes. First, judges appointed under the differing selection mechanisms might systematically handle different cases (Shvets, 2016). Second, judicial adjudication might be correlated with national or subnational institutional dynamics such as democratic transition from military rule that might, for example, cause all judges to rule in favour of the state less often, not just the ones selected by the judicial commission. This generates concerns about potential sorting of cases prior to the reform, national or district specific characteristics correlated with state victories and case delay, independent of the selection procedure. Nevertheless, the particular features of the Pakistani judicial system and an identification strategy we propose allows us to address these issues. First, random assignment of cases ensures that both types of judges are assigned similar cases on average (Arshad, 2017; Haq,

¹⁰ Many such cases abound, with the most recent (high-profile) example in India dates just to February 8th, 2018, when the police recently booked a land grab case against Giriraj Singh who was heading a government agency (Times of India, 2018). Mr. Singh, who is pending trial, is accused of facilitating the illegal "land grab" of a scheduled class villager in the Indian State of Bihar.

2017). Second, Pakistani laws dictating jurisdictions prevent litigants to choose the district in which to file the case. This mitigates many of the selection into cases concerns highlighted in the literature (Klein and Priest, 1984; Ponticelli and Alencar, 2016). Third, the reform had staggered implementation across districts. This is because it took time for the previous judges to retire and new judges under the new selection procedure to be sworn in. Therefore, when the new appointment procedure went into force, its differential exposure on district high courts becomes key to estimate the impact of the reform.

Despite the overall fall in the share of state victories and case duration (as seen in Figure 1), the changes in judicial outcomes were far from uniform across the courts. For instance, state victories (case delay) in the district high court of Peshawar fell from over 60% (3 years) in 2009 to about 30% (1.5 years) in 2014, whereas the state victories (case delay) in district high court of Multan hovered around 65% (4.5 years) during this time period. We show that a large part of these differences can be explained by the different proportions of judges selected under the new selection procedure serving in these districts. For example, Peshawar by 2014 had over 60% of judges selected under the new selection procedures, while Multan had none. We show this is a more general pattern, where the proportion of new judges selected under the new selection procedure in each district largely explains the differences in state victories and case delay.

Nevertheless, an OLS regression of state wins (or case delay) as the dependent variable and the proportion of judges selected under the new selection procedure as the independent variable does not necessarily give us the causal impact of judges selected under the new selection procedure on judicial outcomes. This is because of the possibility of post-appointment reassignments or "transfers" of the judges across the district high courts after they are appointed. Indeed, Iyer and Mani (2012) show that reassignments powers resting with Indian politicians

allowed them to exert substantial control over the bureaucrats, despite strong constitutional provisions for insulating the bureaucracy from politics. They show even though Indian politicians could not dismiss the bureaucrats, but a threat of reassignment to an alternate district allowed the politicians to regulate the behavior of the bureaucrats. This reintroduces the endogeneity concerns since an independent judge might be reassigned to a different district high court.¹¹

To overcome the problem that more independent judges might be reassigned (transferred) to another district high court, we propose an instrumental variable strategy, where we instrument the proportion of newly appointed judges by a 'judge need-based' instrument, i.e., the fraction of judges retiring upon reaching the mandatory retirement age (which has been set at 62 since 1969). Under the assumption that reaching the mandatory retirement age is randomly distributed across districts, we are able to obtain the causal impact of a change in judicial selection procedure on judicial independence and case delay. This effect is independent of the observable and unobservable case, district characteristics, national and subnational institutional dynamics given the plausibly orthogonal distribution of judges' retirement ages across districts. In fact, in a check for balance test we show that the instrument is uncorrelated with a long list of available case and district characteristics.¹² We further control for district fixed effects, year fixed effects, district-specific (linear) trends, and a host of case and district characteristics, which was not possible in earlier studies due to data constraints (Djankov et al., 2003; La Porta et al., 2004; Palumba et al., 2013; Boehm, 2015).

¹¹Although, it should be noted that the judges in Pakistan cannot be directly reassigned by politicians since the reassignment power rests with chief justice of the provincial high court, not the Chief Minister as in the case of Indian Civil Servants (Iyer and Mani, 2012). Nevertheless, a plausible case can be made that high-level politicians might influence the chief justice to transfer the judge.

¹² For instance, the number of lawyers and judges on a case, the type of case (criminal, civil or constitutional), dummy for whether the case involved a land dispute with the government (land cases), presence of Chief Justice in the bench and so on.

We document a substantial impact of the change in judicial selection procedure on judicial independence and case delay. The estimates imply that a 10% increase in judges selected under the new appointment procedure reduces the probability of State Wins by about 4 percentage points and case delay by about 0.3 years. However, there is some heterogeneity in judicial independence across the various district courts. For instance, district high courts in more politically connected provincial capitals experience the largest fall in state wins as a result of new selection procedure relative to the rest of the districts. The results are robust with the coefficient estimates remaining statistically and qualitatively similar across both OLS and IV specifications.

We present evidence consistent with the anecdotal accounts that suggest that the change in selection procedure resulted in an improvement in quality of judicial decisions (Haq, 2017; Sattar, 2017). Judges appointed by the judicial commission are about 15% more likely to rule based on merits as opposed to rulings on technical grounds, relative to those judges appointed by the president.

We further find no evidence of differential trends prior to the reform, we show that appointments instrumented by retirements only impacts state wins and case delay after the reform went into effect i.e. after 2010 and not before. Similar pattern emerges if we compare early and late 'adopters' of the reform, where the fall in state victories and case delay occurs only when the reform was adopted in the respective districts (see Figure 2). We also provide evidence that there is no change in the total number of cases filed or the type of cases filed prior to the reform.

We present evidence consistent with the enforcement-of-the-law mechanism propounded by Hayek (1960) who argued that an independent judiciary can prevent illegitimate coercion by

¹³Late reform 'adopters' districts had no retirements yet and hence no open vacancy for a judge until January of 2013, so no judge selected by the judicial commission could be appointed in these districts from 2010 to 2012 (inclusive).

government through better enforcement of the laws. The reduction in state victories due to the reform can be in part explained by a fall in state victories in land dispute cases with the state. In cases involving these land disputes, judges selected by the judicial commission are about 35% more likely to rule based on merits of the case relative to technical or procedural grounds. That is, a better enforcement of property rights laws by judges selected under the new selection mechanism is important to understand the impact of the reform. We, thus, confirm quantitatively, the anecdotal accounts that suggest the new appointment procedure reduced expropriation of private property by government agencies (Sheikh, 2016; Abbasi, 2017). These accounts also suggest that there has been a change in attitude towards case delay by new and old judges. For instance, the current Chief Justice of Pakistan, Justice Saqib Nisar observed despite the lack of resources that the judges "cannot be exonerated for delayed justice" (Malik, 2018). Earlier, he had attributed large case delay to some "not very competent judges" (Dawn, 2017). This contrasts with the previous (presidentially appointed) justices. For example, Justice Anwar Zaheer Jamali (the previous Chief Justice) declared "that there is no deficiency with the existing judicial system, which is very welltested ... certain external factors are responsible for delays" (Ahmed, 2016). Likewise, the anecdotal accounts also suggest that the new judges adjudicated cases on weekends which is consistent with reduction in case delay. The Economist reports on a Pakistani judge in Lahore "spending a Saturday hearing 16 cases that he has taken up on his own initiative..." (The Economist, 2018).¹⁴

The reduction in case delay due to the change in judicial selection procedure is also consistent with the anecdotal accounts that link case delay with judicial independence. In fact,

-

¹⁴Moreover, Islamabad Times (2018) reports on a separate occasion where the chief justice instructed the courthouse to be open on Sundays.

legal scholars in Pakistan have long argued that delaying the case often favours the government (Naqvi, 1990; Zafar, 2012). The fall in case delay in land disputes with the government is consistent with this interpretation.

Next, we present suggestive evidence that is consistent with anecdotal accounts that postulate that the reform reduced corruption. The judges selected under the new selection procedure are about 20% less likely to receive a highly controversial "Prime Minister's Assistance Package," that awards residential land to bureaucrats. ¹⁶ Likewise, the judges who were appointed under the new selection procedure are about 30% less likely to be politically active prior to their appointments. ¹⁷

We test for plausible alternative explanations to the finding that reform exposure generates a change in judicial adjudication. In addition to the reform causing the change in adjudication, it is also possible that the reform is capturing "retirement effects." For instance, if it takes time for the state-judge relationship to develop, then the reform intensity variable is capturing the impact of judge experience and other possibly unobservable judge characteristics related to his or her

-

¹⁵According to these accounts, in land disputes with the state, the land is typically seized by the government agencies, thus the delay of cases allows government officials to use the property for their private benefit (Arshad, 2017).

¹⁶Some new judges in fact rejected the offers of a residential plot, a former Chief Justice of Pakistan observed "In the case of judges of the superior judiciary, accepting the offer of allotment of even a single plot, in my view, is violation of judges' code of conduct. It's like favouring the judges, how could judges accept the plot from the government against whom they have to hear cases every day?" Abbasi (2017).

¹⁷We proxy politically active judge prior to appointment as being an office holder in the district bar association. In the context of Pakistan, one has to declare political affiliation by running on party ticket when the lawyer runs for office in the bar association. This measure of political activity prior to appointment as a judge has strong anecdotal support. For instance, "Being an office holder of the bar association tells you where the lawyer stands (politically)" (Arshad, 2017).

retirement.¹⁸ To evaluate this claim, we conduct a falsification test where we construct a pretreatment retirement at 62 variables. This variable is the fraction of judges who reach the mandatory retirement age of 62 since 1990 (the earliest year we have data for) till 2009 (inclusive). We re-run the main specification by replacing the reform intensity variable with the post and pretreatment retirement intensity. While there is a strong 'retirement effect' post 2010, there is no evidence of a retirement effect from 1990-2009 (for both State Wins and case delay).¹⁹

We, further, evaluate the hypothesis that the results might be driven by confounding the impact of the reform, with the impact of the move from a military to a democratic regime in 2008. We present two pieces of evidence against this hypothesis. First, we show there are no differential trends prior to the reform. Second, we show that the results remain unchanged when we limit the sample to the democratic period only (2009-2016).

Moreover, it may be argued that we are comparing judicial adjudication due to appointments by a particularly idiosyncratic president just before the reform with appointments by the judicial commission. Since we have judges appointed by 6 different presidents in the dataset, we can examine this claim empirically. We find evidence against this hypothesis, where the results are not driven by a specific presidential appointment, where the judicial commission appointed judges outperform (both in terms of state wins and case delay) presidentially appointed judges regardless of the appointing president.²⁰

¹⁸We, of course, in all the specifications, have always controlled for the age at decision of the judge because of this point. Comparable results are found if we use age at appointment or tenure (age at decision – age at appointment). In fact, we conduct placebo test that provides evidence against age or cohort effects.

¹⁹Specifically, this variable is the proportion of judges retiring in each district from 1990-2009 (all districts had at least one retirement by 2009). Similar results are obtained when we use pre-treatment appointments.

²⁰ We also do a similar test for the Chief Justices in office, where we find similar results, regardless of the Chief Justice in office.

We also show that the sample is representative of the population of cases in Pakistan. Exploiting the Sindh Right to Information Act 2006 that made all cases public for all districts in the province of Sindh, we randomly sample 500 of the previously unpublished cases and compared it with the published case data we used in the analysis. We find that the average case characteristics as well as the outcome variables we used are very similar for both published and unpublished cases before and after the reform.²¹

This paper relates to several strands of literature. First, our work speaks to the literature on selection of public officials (Hanssen, 1999; Besley, 2005; Guerriero, 2011; Shvets, 2016).²² The literature on selection of similar public officials have focused on effects of selection via elections versus executive appointment (Lim, 2013; Besley and Payne, 2013; Hessami, 2018) or selection via elections versus judicial commission (Ash and MacLoed, 2018). The key contribution of this paper is to instead look at appointment via executive appointment versus judicial commission and documenting the causal effect of the change in judicial selection procedure on judicial adjudication.

Second, we contribute to the literature studying courts (Djankov et al., 2003; La Porta el a., 2004; Voigt, 2008; Palumba et al., 2013; Boehm, 2015). Since we use variation in cases across districts subject to the same national institutions, this paper overcomes most of the common

*** 1 1

²¹ We also show that the new case filings in published cases follow similar trends to the whole universe of cases in the district high courts of Pakistan.

²²The current study is close to recent work by Shvets (2016) where she assesses the impact of a change in judicial appointment rule in Russia from the Russian legislature selecting judges to presidential appointment. It is documented that presidential appointment increases state victories by 4.4% though the inclusion of controls such as judge experience makes the result insignificant (at conventional significance levels). Our study is different insofar is that we estimate causal effects. Further, the districts that receive the new judges in Shvets (2016) paper are plausibly nonrandom as discussed by author are chosen by the chairman of the court (chief justice) and causal interpretation requires possibility questionable assumption of constant "tier effect" across courts. Lastly, our study is different in the scope of the data, as we consider *all types of cases* filed with the state as the party and not just cases involving firms as in the case of Shvets (2016) and we also study the mechanisms driving the results.

identification issues that arise in studies that exploit differences across countries. Lastly, we also speak to the literature on corruption of public officials (Mauro, 1995; Ferraz and Finan, 2008, Winters and Weitz-Shapiro, 2013; Bobonis et al., 2016). Most of this literature has focused on politicians not judges. We contribute to this literature by proving evidence consistent with the view that the independence of judiciary can be compromised because of the ability of the executive to distribute gifts, such as distribution of residential land to judges in the present context (Avis et al. 2018).

The rest of the paper is organized as follows. Section II provides the background on the judicial system of Pakistan and describes the specifics of the reform. Section III presents the data, their sources and descriptive statistics. Section IV presents the empirical methodology. Section V presents and discusses the main results. Section VI conducts a battery of robustness checks and examines some alternative explanations to the finding. Section VII concludes.

II. Background

A. Political Landscape

Since the 1990s, Pakistan has been largely dominated by two political parties: the centre-right Pakistan Muslim League Nawaz (PML-N, henceforth) led by Nawaz Sharif, and the centre-left Pakistan Peoples' Party (PPP, henceforth) led by Benazir Bhutto. The 1990s was also a particularly volatile period in Pakistan's history. For one, no government was able to complete its 5-year electoral term. Second, there were 8 changes in prime ministers and 5 changes in the presidents during this period, rotating between the PML-N and PPP.²³ It was in this time of political uncertainty, that the then army chief, General Pervez Musharraf stepped in and seized power to

²³ Later, we exploit this presidential turnover (i.e. judges appointed by different presidents) to show that the results are not a president specific effect.

bring "stability", in what is now known as a "bloodless coup d'état of 1999." General Musharraf consolidated his power and won a controversial referendum in 2002 that awarded him 5 years of presidency and managed to cobble together a coalition government consisting of disgruntled ex-PPP and ex-PML-N lawmakers (Bose and Jalal, 2004).

With the elections due in the January of 2008 and Musharraf leading the polls, the sudden assassination of Benazir Bhutto on December 27th, 2007, drastically changed the political landscape of Pakistan. PPP managed to gain the largest share of the votes (Perlez and Gall, 2008). Many analysts attribute this to a "sympathy wave" sweeping across the country as a direct consequence of the assassination (Abbasi, 2008; Basu, 2008). General Musharraf's political allies failed to get less than 10% of the votes. Musharraf resigned as the President on 8th September 2008, as soon as the impeachment proceedings were due to start against him. On 9th September 2008, Pakistan Peoples Party's Chairman, widower of Benazir Bhutto, Asif Ali Zardari was sworn in as the 11th President of Pakistan. It was under this backdrop that the President Zardari and his party pushed for an amendment to the constitution of Pakistan that would dramatically change the judicial selection procedure in Pakistan.

B. The Judicial Selection Reform

In April of 2010, Pakistan People Party, tabled a constitutional amendment to the parliament. This was also supported by the opposition party, Pakistan Muslim League (N). This *Eighteenth Amendment* to the constitution of Pakistan was passed by the parliament on 15th April 2010 and signed into law by President Zardari on 19th April 2010, when it came into effect (Tavernise and Masood, 2010; Pakistan Constitutional Law, 2010). As one commentator put it "The 18th was mostly a good law ...but it was debated and created in total secrecy ... if you can't remember any public debate or parliamentary scrutiny, that's because there was none... But the demands of

secrecy and urgency got it done" (Almeida, 2018). ²⁴

The amendment meant that the following clause was removed from the constitution of Pakistan:

"The Chief Justice and each of other Judges of a High Court shall be appointed by the President in accordance with Article 175A."

This was replaced by:

"There shall be a Judicial Commission of Pakistan, for appointment of Judges of the Supreme Court, High Courts and the Federal Shariat Court. The Commission by majority of its total-membership shall nominate for each vacancy of a Judge in the Supreme Court, a High Court or the Federal Shariat Court, as the case may be." (Constitution of Pakistan, 2010; 2017). ²⁵

The judicial commission consists of "Chief Justice of Supreme Court and 4 senior most judges, a former judge (nominated by the Chief Justice of Pakistan), federal law minister, and the attorney general of Pakistan, along with a senior advocate of Supreme Court nominated by the Pakistan Bar Council for two years" (Constitution of Pakistan, 2010; 2017).²⁶

This amendment implied that the supreme and high court justices will now be appointed by a judicial commission (consisting of peer judges and senior lawyers) with no direct involvement of the president.²⁷ Many accounts suggest that effective appointment power of the executive is

²⁴The Eighteenth Amendment was broadly aimed to increase provincial autonomy and weaken the power of the president where the power to unilaterally dismiss the parliament and select judges was taken away from the president. Many observers believe that this legislation was enacted to avoid abuse from the past military rulers who had ruled as presidents (Haq, 2017; Almeida, 2018).

²⁵ Furthermore, Article 209 of the Constitution stipulates that judges can only be removed through filing a reference to their peers which has been same both before and after the reform (Constitution of Pakistan, 2017).

²⁶ For appointment of high court judges as in the present case, all members above plus the provincial chief justice, provincial law minister, the most senior judge of the provincial high court, and a lawyer nominated for two years by the provincial bar council are also included as members of the judicial commission.

²⁷Attorney General and Law Minister are lawyers and represent the executive branch of the government.

severely curtailed by this reform since the judges form the overwhelming majority (6/9) in the commission (Ijaz, 2014; Iqbal, 2015).²⁸ We interpret this move from presidential appointment to selection by judicial commission as a de jure decrease in executive control over the judiciary and we evaluate the impact of this reform on judicial adjudication in this paper.²⁹

C. The Legal History and the Judicial Structure of Pakistan

The Indian High Courts Act was passed by the UK parliament in 1861. This authorized the Crown to create the high courts in the Indian colony. These courts served as precursors to the high courts of modern day India and Pakistan. The legislation stipulated the mandatory retirement age of judges was to be set at 60 years, along with location and procedural rules governing these courts. With the independence of India and Pakistan from British rule in 1947, gradual changes were made in the legal institutions in both countries. A change relevant to the paper is the raising of mandatory retirement age from 60 to 62 years. India raised the retirement age of high court judges to 62 years in 1963 and Pakistan made the same change in 1969 (both as part of amendments to their respective constitutions). The mandatory retirement age of high court judges has been 62 years ever since (in

²⁸The 18th amendment also created a bi-partisan parliamentary committee consisting of 4 members from the treasury and 4 numbers from the opposition. The nominations by the judicial commission has to be confirmed by this committee but its effective power is limited since the Judicial Commission can overrule the parliamentary committees' objections. This was not in the original 18th amendment but was incorporated in December 20th, 2010, in the form of the 19th Amendment. The 19th amendment 1) increased the number of judges in the judicial commission (judges now had the overwhelming majority of 8/11 in the Judicial commission as opposed to 6/9 in the 18th amendment). 2) the Judicial Commission would now also have the power to overrule the bi-partisan Parliamentary Committees' objections to the appointments (Pakistan Constitutional Law, 2010).

²⁹ We do not argue that this new arrangement is completely immune from executive influence, just that the move to appointment by the judicial commission reduces executive control over the judiciary relative to the presidential appointment.

both India and Pakistan).³⁰

Pakistan's judiciary is composed of a three-tier hierarchical structure. This is summarized in Figure 3. 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.

More important for the study 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*. Cases involving *The State* as a party involve cases filed against the federal government, provincial governments, local governments, government agencies or any organ of the state that yields executive authority (such as the office of the President or the Prime Minister).

From 1990 to 2016, about 40% of all cases filed in the High Courts were "constitutional petitions" in nature and over 80% of these constitutional cases involved government agencies responding to land dispute claims with regard to land ownership or expropriation. 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. This is in the form of 16 district high court benches (about 4 district high courts in each of the 4 provinces). Figure 4 shows the location of the high court benches along with their respective jurisdictions. High courts in the provincial capitals

³⁰Likewise, from 1973 onwards, the Article 209 of the constitution of Pakistan stipulated that the judges although can be appointed by the president (or judicial commission following 19th April, 2010) but the powers of dismissal of judges rests only with the senior peer justices (i.e. the Supreme Judicial Council): "The Council shall consist of, a. the Chief Justice of Pakistan; b. the two next most senior Judges of the Supreme Court; and c. the two most senior Chief Justices of High Courts." (Constitution of Pakistan, 1973; 2010; 2017).

(Lahore, Karachi, Quetta and Peshawar) are called "principal benches" while those in other areas are called "non-principal benches" (Arshad, 2017). Finally, there is the final appellate court, the Supreme Court of Pakistan, located in the federal capital of Islamabad. It typically hears criminal and constitutional appeals 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 (Haq, 2017).

III. The Data

We combine annual reports on the high courts submitted to the Federal Ministry of Law, Justice and Human Rights, judicial administrative data, bar council records, published case data in law journals of Pakistan, Public Accounts Committee (PAC) report on residential plot allocations to the judges, bar associations records and census data to construct a unique dataset of over 5000 cases covering all of the 16 district high courts of Pakistan (shown in Figure 4).³¹ We combine case characteristics from all published cases in the law journals with judge characteristics data from the judicial administrative records and district characteristics data in the census records.³² Table 1 reports the summary statistics of the variables used in the analysis and appendix A provides the data sources, definitions and further explanations on the list of variables used in the study.

Outcome variables. — The outcome variables are State Wins and Case delay. The unit of

³¹Information on jurisdictions for the district courts is obtained from respective bar council records (Arshad, 2017; Shoaib, 2017, Haq, 2017).

³²A raw data example of matching the full name of the judge and his/her characteristics in judicial administrative data with judge full name and case characteristics in judgement order is illustrated in Figure B.1 (and Figure B.2) in Appendix B.

observation is at the case level. These variables are constructed from the texts of judgment orders that contains the information detailing the outcome of the case, along with the case filing and decision years.³³ Following the literature (e.g. Djankov et al., 2003 and La Porta et al., 2008), we asked law firms to code these variables. In particular, the judicial dependence variable called "State Wins" is coded as 1 for state victories and 0 for state losses, in all the cases that have the government as a party.³⁴ This includes the organs of the state yielding executive power such as public agencies, offices of the prime minister and the president, federal, provincial and local governments (in line with the conceptualizations of The State as an executive organ in Montesquieu, 1748 and Hayek, 1960). This is similar to Shvets (2016)'s "State Victories" as a measure of judicial independence. Although, her study focuses only on cases involving firms and the State, whereas we consider cases filed against the state that involve both firms and individuals, as well as, we do a finer grain analysis of the type of cases involving the State (criminal, constitutional and cases involving land disputes with the government). We asked the laws firms to record the decision and case filing year for each case from which we construct the case delay variable (decision year – filing year).

The main explanatory variables. — We construct a district-year varying variable that we

³³In particular we compiled data from all the journals that are available to lawyers to prepare their cases and also all cases uploaded on the high court websites. The specific journals utilized are as follows: Pakistan Legal Decision Journal (PLD), Pakistan Law Journal (PLJ), Civil Law Cases (CLC), National Law Reports (NLR), Criminal Law Journal (CrLJ), Yearly Law Reports (YLR) and Peshawar Law Reports (PLR).

³⁴For an example of such a case, see Figure B.1 in Appendix B where raw case data containing text of the judgement order is presented that is used to construct the judicial outcome measures. In the case of Figure B.1, State Victory variable will take the value of 0, since the petition was accepted (against the state). Likewise, in Figure B.2, land expropriation case the "petition is dismissed", in which case our State Wins variable takes the value of 1. Examples of these land development agencies are as follows: Defence Ministry's Housing Authority, Lahore Development Authority, Karachi Development Authority, Capital Development Authority, Peshawar Development Authority (PLD, 2016). Law firm following a standardized rubric coded as 1 if the judgement order contained phrases such as "Case state against the state is dismissed" and 0 if the judgment contained "Petition against the state is accepted" (for more details see raw data and an explanation on construction of the dataset in Appendix B).

call Reform Intensity. This variable is the fraction of judges selected under the new selection procedure. Data on the appointments and other judge characteristics is constructed from the judicial administrative records obtained from the Registrar Offices of the high courts. Data on total judges in each district high court is obtained from the High Court Annual Reports submitted to the Ministry of Law, Justice and Human Rights, Government of Pakistan. These two sources are also used to construct the instrumental variable, "Retiring at 62/Total Judges" in the Panel C of Table 1.35 This variable, also varying by district-time, is the the fraction of judges who reach the mandatory retirement age of 62 (in the post reform period).36

Additional Data: Case, Judge and District Characteristics (controls). — We rely on a combination of judgments texts, newspaper reports, Public Accounts Committee report, judicial administrative data, bar associations and census records to construct case, judge and district characteristics.

The data on case characteristics is based on all the judgement text published in all the available law journals of Pakistan (PLD, PLJ, CLC, NLR, CrLJ, YLR, PLR).³⁷ This includes case characteristics such as the district where the case was heard, the year when the case was filed, the full name of the judge(s) adjudicating on the case, the number of lawyers and judges, number of pages of the judgement order, type of the case (criminal, civil or constitutional), dummy for whether the case involved a land dispute with the government (land cases) and so on. We asked

-

 $^{^{35}}$ As an illustration, consider the district high court of Larkhana that had 3 judges. In 2012 two judges reach the mandatory retirement age of 62. In 2012 a judge selected under the new selection procedure was appointed. This would mean in 2012, the New Judges/Total Judges = 1/3 and the instrument Retirement at 62 / Total = 2/3.

³⁶ We also construct the proportion of pre-reform appointments and retirements based on the same data sources that we use for evaluating pre-trends.

³⁷In particular we compiled data from all the journals that are available to lawyers to prepare their cases and also all cases uploaded on the high court websites (see data appendix A for more details).

the two law firms in Pakistan to independently code all the available published cases in the law journals. In Table B.1 of the appendix we present the averages of the outcome variables as well as the case characteristics and the correlation coefficients of the variables across the two law firms.³⁸

Data on judge characteristics presented in Table 1 (Panel B), is obtained from the judicial administrative records available from the Registrar Offices of the high courts of Pakistan and provincial high court websites. This includes information on date of birth, appointment dates and retirements of the judges. Nevertheless, data on Prime Minister's Assistance Package is obtained from reports from the Public Accounts Committee (PAC, henceforth) of the parliament. In a report published by PAC (and titled "List of judges allotted plots since 1996"), the names of all the judges who had received (residential) plots under this assistance package from 1996 onwards is provided (Ahmed, 2016; Abbasi, 2017). The PAC has repeatedly called to discontinue this program and many judges including a former Chief Justice of Pakistan has reportedly declined the offer of such a plot and has openly criticized it (Abbasi, 2017; Sattar, 2017).³⁹ We construct a dummy variable for the judge who received a (residential) plot as part of this scheme and combine it with the respective judge, district and case characteristics in the dataset. 40 Furthermore, data on being an office holder in the bar association prior to appointment of the judges is obtained from a combination of biographical information in the judicial administrative data, annual reports of district high courts and bar associations' records. Combining the data sources gives us information

³⁸ Since, the same 5035 cases are coded by the two law firms, there is high correlation between the coded variables. Therefore, we get almost identical results if we use data from either of the law firms. The results from Firm 1, however, are reported in the paper.

³⁹"In the case of judges of the superior judiciary, accepting the offer of allotment of even a single (residential) plot, in my view, is violation of judges' code of conduct. It's like favouring the judges, how could judges accept the plot from the government against whom they have to hear cases every day?" Justice (r) Jawwad Khawaja quoted in The News International (2017).

⁴⁰We only have information if the judge received the residential plot, not when they received it.

on 5,035 cases, all the corresponding 362 judges and all the 16 district high courts of Pakistan. For more information on the sources and further description on each variable used in the analysis, see data appendix A.

IV. Empirical Methodology

We use cross-district and over-time variation in reform intensity to estimate the effect of judicial selection reform on state wins and case delay at the case level. The main specification is as follows:

$$Y_{cjdt} = \theta + \alpha \ Reform \ Intensity_{dt} + \beta_d + \gamma_t + \delta_d \ t + V'_{cdt} \tau + W'_{dt} \varphi + \varepsilon_{cdjt} \tag{1}$$

Subscripts c, j, d and t index cases, judges, district courts and years, respectively. Y denotes state wins or case delay. Reform Intensity is the proportion of judges appointed by the judicial commission. Since we run a case level regression, this variable can be interpreted as the probability a case was adjudicated upon by a judge appointed under the new selection procedure. We instrument this variable with a judge need based instrument, that is the proportion of judges retiring upon reaching the mandatory retirement age of 62 after the reform. The coefficient α is the 'difference-in-differences' estimate of the effect of the judges appointed under the new selection procedure on the judicial outcomes we consider. β_d and γ_t are district and year fixed effects, respectively. Since different districts might have different institutional development trajectories, we control for the district-specific (linear) trends ($\delta_d t$). Likewise, we also control for case and district characteristics (V'_{cdt} and W'_{dt}).

⁴¹As part of the robustness checks, we also show that we obtain very similar results if we aggregate the data at district-time level (i.e. to the level of variation of the main explanatory variable and its corresponding instrument).

⁴²That is, we control for the type of the case (constitutional, criminal or civil), number of lawyers, judges in the case, and presence of court chief justice in the bench and district characteristics (e.g. population) given in Table 1, panel A

Moreover, since the level of variation in the reform intensity and its corresponding instrument is at the district-time level, this can make the cases within the district courts correlated over time. Therefore, we cluster standard errors at the district court level.

For α to give us the causal effect of the reform, we examine the identification assumption governing the differences-in-differences estimator, i.e., whether there are systematic differences in the trends of outcomes of interest prior to the reform. We test for this by running a placebo test where the new judicial appointments prior to the reform have no impact on the outcome variables. We also observe this graphically, where a fall in state wins and case delay only occurs when the reform hits the respective districts.⁴³

V. Main Results

5.1. The Effect of the reform on State Wins and Case Delay

Table 2 presents the estimated effect of the judicial selection reform on state victories. The results yield strong and robust evidence of a substantial negative effect of the change in judicial selection procedure on state victories. Panel A presents the results of estimating equation (1) by OLS and IV (second stage), while Panel B presents the corresponding first stages. The first column of Panel A reports the results of the most basic OLS specification with no regressors apart from the fraction of judges selected under the new appointment procedure. In column 2, we add district,

and C. Note, we do not control for judge characteristics since these are plausibly correlated with the reform. Nevertheless, as a robustness check, instead of including age at decision, we test with age at appointment or total tenure (age at decision – age at appointment) to find the results are almost identical.

⁴³Likewise, we also conduct a 'check for balance' test where we replace the dependent variable in the baseline equation (1) with all the available case and district characteristics to find them uncorrelated with the instrumented reform intensity variable.

time fixed effects, district-specific trends as well as the case and district characteristics reported in Table 1.⁴⁴

In column 3 of Panel A, we instrument the main explanatory variable with the fraction of the judges who reach mandatory retirement age of 62. Likewise, in column 4, we also add all the fixed effects and controls as in column 2. The first stages of the 2SLS is presented in Panel B, just below the second stage results. The instrument is a strong predictor of the proportion of appointments under the new selection procedure with the F statistic above 75 in both instances. In all specifications we find a negative and statistically significant effect of the judicial selection reform, estimated by the coefficient on the proportion of judges selected under the new selection procedure. The magnitude of this coefficient is very similar in the OLS as well as the IV specifications. In particular, a 10% increase in the judges selected under the new appointment procedure reduced the probability of state wins by about 4 percentage points (where average state victories before the reform is about 55%).

Does this increase in judicial independence comes at the expense of increased cased delay? It seems plausible to postulate that independence might require time and effort and hence the increased independence might have the inadvertent effect of also increasing case delay. We present evidence inconsistent with this hypothesis. Table 3 presents the estimated effect of the judicial selection reform on case delay where Panel A reports the results of estimating equation (1) by OLS and IV, while Panel B presents the corresponding first stages. The results show a substantial

⁴⁴We also control for the age of the judge. In this reported regression, we use age at decision, almost identical results are found when we use age at appointment or judge tenure as controls (age at decision – age at appointment).

⁴⁵ Almost all judges retire only when they reach the mandatory retirement age (92%). The remaining are promoted to the supreme court (6%) or exit due to other reasons such as dying in office (2%).

⁴⁶The point estimates of the OLS specifications are within the confidence interval for the IV-point estimates. Nevertheless, the larger point estimate in IV estimations can be due to larger measurement errors in OLS estimations or/and a downward bias.

negative effect of the reform on case duration across all specifications (OLS and IV). Specifically, a 10% increase in the judges selected under the new appointment procedure reduces case delay by about 0.3 years or about 4 months (where average case delay before the reform is about 4.5 years).

Next, we test the main identifying assumption of the difference-in-differences, i.e., whether there are differential pre-trends in the judicial independence and case delay among the districts with high and low prevalence of judges selected under the new appointment procedure. First, we graphically examine differential trends by comparing the evolution of state victories and case delay for districts where the reform hit early (2010, 2011, 2012) relative to those districts where the reform hit later (2013, 2014, 2015).⁴⁷ We observe, state victories and case delay only begins to fall when the reform hits the respective districts whereas we observe relatively negligible change in judicial outcomes for the districts until the judges under the new selection procedure are appointed in these districts (Figure 2).

Second, we conduct a placebo test. We consider sample of cases within 3-year periods from 1998-2016 and estimate equation (1) for both state wins and case lag. ⁴⁸ Figure 5 visually represents the results of plotting the coefficients of new judges appointed instrumented by retirement at 62 years both before and after the reform. The results indicate the absence of differential trends, since changes in judicial outcomes occur only following the change in the judicial selection procedure in 2010.⁴⁹

⁴⁷Late reform 'adopters' districts had no retirement and hence open vacancy for a judge until January of 2013, so no judge selected by the judicial commission could be appointed in these districts from 2010 to 2012 (inclusive).

⁴⁸We start from 1998 since from this year onwards, we have enough observations across all 16 district high courts and degrees of freedom to run equation (1) with covariates corresponding to those in Table 2.

⁴⁹As part of the robustness checks, we will also present the reduced form where we show that there is a strong 'retirement effect' post 2010, but no evidence of such a retirement effect from 1990-2009 (for both State Wins and case delay).

In the next subsections, we explore the mechanisms linking the reform with state victories and case delay. First, we examine the type of cases driving the results. Second, we examine the type of judges selected under the new and old appointment mechanism.

5.2. Mechanisms: the type of cases driving the results

Hayek (1960) notes that an independent judiciary can limit the power of the other branches of the state by better enforcement of the law. That is, an independent judiciary can prevent illegitimate coercion on part of the organs of the state yielding executive authority.

We present evidence consistent with this enforcement-of-the-law mechanism where better enforcement of law regulating land disputes by the new judges is an important mechanism explaining in the impact of the reform. We, begin, by showing that part of the reduction in state victories can be explained by a fall in state victories in land dispute cases involving the state. Later, in subsection 5.4, we show that judges appointed by the judicial commission are much more likely to rule on merit as opposed to on procedural or technical ground in land cases with the government.⁵⁰

The land cases involve ownership disputes and expropriation claims with the government. Many anecdotal accounts suggest that the expropriation of private property by government agencies (such as by the Defense Housing Authority, Lahore Development Authority, Karachi Development Authority, Capital Development Authority) has been an important problem in

27

⁵⁰Although, we have relatively limited data on this but we examine how the fraction of cases decided on merit (cases decided based on evidence and the "spirit" of the law) vis-à-vis procedural or technical grounds changes after the reform (see section 5.4).

Pakistan (Ijaz, 2014; Abbasi, 2017).⁵¹ In fact, some legal scholars in Pakistan go as far as to argue that land disputes involving the state are instances where the government is almost always wrong (Sheikh, 2016; Arshad, 2017).

Table 4 (Panel A) presents the impact of the reform by the type of case. Column 1 shows that an increase in the proportion of judges appointed under the new selection procedure reduces state victories in constitutional cases (against the federal, provincial and local governments). However, the largest fall in state victories occurs in the cases involving land disputes with the government (column 2).⁵²

Moreover, column (3) of Table 4 shows that there is no effect of the reform on "criminal cases" involving the State, i.e., the reform does not impact the state prosecution rates in the criminal cases.⁵³ This more tightly links the mechanism driving the reduced state wins as an increase in judicial independence from the executive branch of government, since we do not find an effect of this reform on criminal cases.⁵⁴

We also examine whether the case delay varies by the type of the case. We find a reduction in case delay in all types of cases, with the largest reductions in land and civil cases (although considering the confidence interval, we cannot reject the null of homogeneous effect of the reform

⁵¹For an example of such a case, see Figure B.2 in Appendix B where raw case data containing text of judgement orders is presented that is used to construct the judicial outcome measures. In the case of Figure B.2, State Victory variable will take the value of 1, since petition of the (potential) owner was dismissed in favour of the state.

⁵² Of course, considering the confidence interval, we cannot reject the null of a homogeneous effect.

⁵³Ponticelli and Alencar (2016) also attribute their finding of decreased court delay increasing firm access to finance in Brazil to better enforcement of bankruptcy law mechanism. We complement this study and combine case delay with judicial independence and study the mechanisms by analysing the different types of cases.

⁵⁴Although, there has been instances where the executive authority was abused to punish political opponents in criminal cases, especially in the General Zia's Martial Law regime in the late 1970s, but these cases even then formed a small fraction of the total criminal cases filed in the courts (Sheikh, 2016; Haq, 2017).

on case delay across the different types of the cases). The fall in case delay is consistent with the anecdotal accounts that suggest a change in judicial attitude towards case delay by new and old judges. For instance, a judge selected under the new selection procedure observed that despite the lack of resources that the judges "cannot be exonerated for delayed justice" (Malik, 2018) and that case delay is due to some "not very competent judges" (Dawn, 2017). Likewise, The Economist (2018) report on some judges spending weekends adjudicating upon cases is also consistent with this view. These statements contrast with the previous (presidentially appointed) judges, who had declared, for instance, "that there is no deficiency with the existing judicial system, which is very well-tested ... certain external factors are responsible for delays" (Ahmed, 2016).

The reduction in case delay for judges appointed under the new selection procedure can be interpreted as reduction in "court congestion" or an increase in "judicial efficiency" as in much of the literature (Djankov et al., 2003; Chemin, 2009; Voigt, 2016; Ponticelli and Alencar, 2016). Nevertheless, this reduction in case delay can also be linked to judicial independence since many anecdotal accounts suggest that judges deliberately delay cases involving the state as strategy to favour the government: "justice to the common man is delayed, judicial independence is not achieved" (Zafar, 2012). It is argued that this is because government officials use the expropriated land for private benefit while the case is pending in the court (Arshad, 2017; Haq, 2017). The large falls in case delay in land disputes with the government is also consistent with the view that judicial independence and case delay might be linked.⁵⁵

⁵⁵Although considering the confidence interval, data at hand and reduction in case delay in civil cases, such a link is suggestive.

5.3. Mechanisms: the type of judges driving the results

Next, we evaluate the differences in observed characteristics of the judges selected under the two appointment procedures. Table 5 compares the characteristics of the judges appointed under the old and new procedure. We notice that the judges appointed under the old regime of presidential appointment dispense decisions when they are younger, more likely to be (formerly) the office holders of the political bar associations and to receive the controversial Prime Minister's Assistance Package (that awards residential land to bureaucrats). Although, the allotment and receipt process of this package is opaque but we interpret arbitrary allocation of residential land to some judges and not others by the Prime Minister, as a plausible proxy for corruption in the judiciary.⁵⁶

Many reports on the inappropriateness of the PM assistance package emerges in the news media where various stakeholders have repeatedly called to discontinue the program (Sattar, 2017). In fact, some judges appointed under the new procedure rejected the offers of residential plots by the Prime Minister Secretariat. The most salient example is the rejection and open criticism of the assistance package by the then Chief Justice of Pakistan, Justice Jawad S. Khawaja, who observed:

"In the case of judges of the superior judiciary, accepting the offer of allotment of even a single (residential) plot, in my view, is violation of judges' code of conduct. It is like favouring the judges, how could judges accept the plot from the government against whom they have to hear cases every day?" (Abbasi, 2017). Likewise, recently the Islamabad High Court judge (selected under the new selection mechanism), Justice Athar Minallah, "cancelled" a new allocation of such plots by the

⁵⁶We only have information if the judge received the residential plot, not when they received it. Furthermore, the whole process of the plot allocation is somewhat opaque, but is considered highly inappropriate by many stakeholders involved, therefore, the results from this will just confirm the anecdotal accounts and causality here should be cautiously interpreted.

government in October of 2017. In the judgement Justice Minallah noted "the beneficiaries are serving or retired …judges of the superior courts…the mode is devised to gain private financial benefit on account of non-transparent disposition of land vested in and owned by the government… The loss to the public and private gain for a few privileged individuals is obviously not a public purpose" (Asad, 2017; Sattar, 2017).⁵⁷

Nevertheless, results from Table 5 are highly suggestive. For instance, it is plausible that the new judges simply did not have enough time to receive the PM Assistance Package. Therefore, next we show how the reform impacted observable judge characteristics. We do so by re-running the baseline specification (1) that controls for age, where we replace the outcome variables with judge characteristics. Table 6 presents these results. We observe that the new judges are less likely to receive the PM assistance package or be the office holder of political bar associations prior to their appointments even when we control for time in office or host of case and district characteristics. Since, being office holder of a political bar association requires running for elections on political party platform ("ticket"), we consider it as a plausible proxy for political activity prior to the appointment (Arshad, 2017). It seems that judges selected by the judicial commission were less likely to be political prior to their appointment. This is consistent with Ash and MacLeod (2018), who find that judges appointed by judicial commissions of former judges and lawyers in the United States perform better relative to judges selected via elections. We should

⁵⁷Justice Minallah goes on to quote, the French economist, Frederic Bastiat, who observed that "when plunder becomes a way of life for a group of men in a society, over the course of time they create for themselves a legal system that authorizes it and a moral code that glorifies it." (Sattar, 2017).

⁵⁸In line with baseline regression, we use age at decision. Nevertheless, the results are identical when we use to age at appointment or tenure in office (age at decision – age at appointment).

⁵⁹Since, the level of variation in judge characteristics is at the judge level, we also find that this result is robust to running the regression at the judge level.

note, however, that the reform might be correlated with these and other potentially unobservable judge characteristics, therefore we should interpret these results with caution.

We also provide evidence that the impact of the reform was larger in more politically connected districts. To do this, we split the sample into districts that contain the provincial capitals (principal benches) and the districts that do not (non-principal benches) and estimate equation (1), with the full set of control and fixed effects as in Table 2. Table 7 presents these results. We find that across both groups of districts, increase in reform intensity reduces state victories in line with the full sample results. That is, the impact of the reform was not limited to a particular region. Nevertheless, we find that the reform had a larger impact in the districts containing the provincial capital, relative to the districts that did not. In particular, a 10% increase in the new judges reduces state wins in districts containing the provincial by about 7 percentage points relative to 3.8 percentage points reduction in state victories in the non-provincial capital districts.

5.4. Does the change in selection procedure impact the quality of decisions?

As is recognized in the literature, it is hard, if not impossible, to summarize the quality of judicial decisions in quantitative analysis (Pound, 1963; Voigt, 2013; Chen et al., 2016). Our use of state wins and case delay as the outcome variables are no different and might not capture the quality of the judicial decisions. Nevertheless, we present evidence consistent with the view that the new judicial appointment mechanism improved the quality of judicial decisions.

⁶⁰We also observe this using different classification of districts. For instance, by examining the district courts in their respective provinces.

⁶¹This is consistent with the anecdotal accounts that suggest that district courts in provincial capitals have a particularly strong hold of the executive head (chief minister) and notorious "development authorities". Hence, a large number of land cases that some legal scholars argue are instances where the state is "mostly wrong" are much larger in number at the district high courts in the provincial capital (Haq. 2017).

Specifically, we show that the judges appointed by the judicial commission are more likely to rule based on merits of the case. In common law jurisprudence, the rulings on merit imply that the judicial decision is "based on evidence rather than technical or procedural grounds" (Pound, 1963).⁶² We randomly sample 500 cases decided by judges appointed by the president and the judicial commission from the dataset and ask two law firms to ascertain whether the case was adjudicated upon merit. Table 8 presents the results. We note that judges appointed by the judicial commission are about 15% more likely to rule based on merits of the case relative to technical or procedural ground. The analysis of the type of cases reveal that the largest increase stems from the rise of meritorious decisions (from 40% to 75%) in the land disputes with the government. The differences in means is large and statistically significant. This is consistent with anecdotal accounts and evidence presented earlier that suggested that better enforcement of law regulating land disputes is important to understand the impact of the reform.⁶³

5.5. Discussion of the Magnitudes

In this subsection we discuss the magnitudes of the impact of the reform. Results from equation (1) imply that a 10% increase in judges selected under the new selection procedure reduces State Wins by about 4 percentage points (considering the OLS estimates). Likewise, a 10% increase in judges appointed under the new selection procedure reduces case lag by 0.3 years. To put this into perspective, the average state wins (case lag) is about 55% (4.5 years) before the reform. An implication of the coefficient estimates is that when 100% of the presidentially

⁶²Decision under merits, observing the spirit of the law and based on evidence as opposed the technicalities of law is an 'ideal' which common law regime strive towards (Pound, 1963; Tidmarsh, 2009).

⁶³Although, this is not conclusive evidence. Ideally, we would have like to have data for meritorious decisions for all the available 5035 cases and use it as a dependent variable, but data limitation prevents us to do this.

appointed judges are replaced by those selected by the judicial commission, estimates form equation (1) would imply the state wins (case lag) would fall by 40% (3 years).

Many legal scholars in Pakistan agree that land disputes and constitutional petitions against the state have historically been instances where the state violated the private property laws, for instance, by expropriating land (Haq, 2017). Therefore, it would be natural to think more independent judges cleared a lot of such cases in the system. The extent of land expropriation by the state can be gauged from ruling by a court that ordered Karachi Development Authority alone to return 35, 000 "encroachments" to their owners (The News, 2017). In fact, many lawyers in Pakistan go as far as to argue that land cases involving the state is almost always where the state is at fault (Sheikh, 2016; Arshad, 2017). Although, we do not go as far but we do note that judges appointed by the president ruled on merits of the case in land disputes with the government about 40% of the time, relative to judges appointed by the judicial commission that ruled on merit 75% of the time (Table 6).

Likewise, as discussed earlier, anecdotal accounts also suggest that the new judges had a completely different attitude towards case delay and in some instances, the judges selected under the new mechanism even heard cases on weekends (Islamabad Times, 2018; Arshad, 2017, The Economist, 2018). In fact, the link between case delay and state wins should be taken in conjunction with the accounts that suggest that government uses delaying the case as a tactic to curb judicial independence, as observed by a noted legal scholar in Pakistan, "justice to the common man is delayed, judicial independence is not achieved" (Zafar, 2012).

We should, nevertheless, interpret the 100% replacement of judges with caution. This is due to several reasons. First, by the end of 2016 where the sample terminates about 70% of the presidentially appointed judges are replaced by judges selected under the new selection mechanism

and a 100% replacement is an out-of-sample extrapolation that might be inappropriate with the data at hand.

Second, there is evidence of a non-linear effect over time. From Figure 5, we can notice that the impact of the reform is markedly lower from 2013 onwards. In fact, estimates imply that from 2010-2013, a 10% increase in judges appointed under the new selection mechanism reduces state wins (case delay) by about 5.5 percentage points (0.6 years), whereas from 2013-2016, a similar increase only reduces state wins by about 2 percentage points (0.2 years). A formal test confirms that the two coefficient estimates are statistically different.

This fall in magnitude is precisely in line with another piece of evidence linked with the mechanisms driving the results. From Figure 6, we can note that land case filings begin to fall starting in 2013, while all the other type of cases (civil, constitutional and criminal) continue to follow an upward trajectory. Therefore, the new judges seem to have induced a strategic response by the government, where it might have reduced its land expropriating activities. This is consistent with the view that suggests that initially there were a lot of case backlog and land expropriation cases in the system that was disposed of by the judges selected by the judicial commission, whereas later the government responded by reducing land expropriations, after observing the changed behavior of the new judges (Sheikh, 2016). This can explain both a reduction of new land cases filed and a fall in the impact of the reform following 2013.

5.6. How representative is the sample?

In this subsection we discuss the representability of the sample. The dataset we used consists of the universe of all cases published in the law journals of Pakistan. A priori it is unclear how this compares with the universe of all cases adjudicated upon in the district high courts of

Pakistan. Although, the law journal posit that they randomly sample the cases, but it is a plausible concern that they are biased towards high profile cases (PLD, 2017). This can cause problem for the results if this publishing activity is correlated with the treatment variable. Although, it is impossible to completely rule out this possibility, but we present evidence that the sample we use is a representative one.

To do this, we exploit the Sindh Freedom of Information Act 2006 that stipulated for the province of Sindh, all government documents must be made public from January 2007. This makes the judgement orders available for the province of Sindh beyond what is published in the law journals of Pakistan. Helpfully, the Sindh High Court Registry also classifies whether the judgement was published or not. This allows us to compare unpublished Sindh high court data with the published sample we used.

We randomly sample 500 of the cases from 2007 to 2016 in the province of Sindh and compare the average case characteristics of these unpublished case data with published data for Sindh we used in the analysis. Table 10 presents these results. Reassuringly, we find that the average case characteristics and outcome variables are very similar for published and unpublished data for Sindh.⁶⁴ Furthermore, we show that the published dataset used in the analysis follow similar trends in new cases filing when we compare it with the whole universe of the cases filed.⁶⁵

⁶⁴These differences of means are also similar if compare judges under the two selection mechanisms.

⁶⁵ The results are presented in Figure B.4 in the Appendix B.

VI. Robustness Checks

In this section, we briefly describe some of the sensitivity tests we conducted to examine the robustness of the findings. First, we verify that the results are not driven by the confounding of the reform with retirement effects or the transition from dictatorship to democracy. Second, we demonstrate the robustness of the results to appointments by different presidents and aggregation of the case-level data into a district-time panel. Third, we verify the results by using an alternate empirical specification and conduct a check for balance to show that the reform intensity variable is uncorrelated with the available case and district characteristics.

It is possible that the results might not be capturing the effect of arrival of new judges under the new selection procedure but instead the retirement effects of old judges in general. For instance, the judges close to retirement age, might adjudicate differently or have different judge-state relationships, independent of how they were selected. To examine this possibility, we conduct a falsification test. To do this, we construct a pre-treatment retirement at 62 variable which is the fraction of judges retiring in the district since 1990 (the earliest year we have data for) till 2009 (inclusive). We re-run the reduced form of the main specification by replacing the reform intensity variable with the post and pre-treatment retirement intensity. Table 9 presents these results. While there is a strong 'retirement effect' post 2010, there is no evidence of such a retirement effect from 1990-2009 (for both State Wins and case delay).

Furthermore, one might argue that the reform (and the consequent reduction in state wins and case delay) is capturing a move from dictatorship to democracy. This is because from 1999 to 2008, there was military rule in Pakistan, and that the controls as well as the identification strategy

⁶⁶The addition of the age of judge as a control mitigates but might not necessarily eliminates this omitted variable bias.

might not be able to disentangle the effects of this democratic transition from the effects of judicial selection.⁶⁷ Therefore, we limit the sample pertaining to the democratic period only, that is, from 2009 to 2016.⁶⁸ Table 11 present these results. The results remain qualitatively and statistically similar as in the earlier regressions.⁶⁹

It can also be argued that litigants are more likely to settle a case anticipating the change in judicial selection procedure (Chen et al., 2016). Given our instrumental variable strategy, this would require that litigants in each district court are able to track the distance of judges' current age from his or her retirement ages, which is unlikely (given this information is not easily accessible and unavailable in local district high courts). Although, we cannot completely rule out this possibility, we evaluate the number of total case filings from Annual Reports submitted by each high court to Ministry of Law, Justice and Human Rights. Figure 6 plots the total number of cases filed both before and after the reform and a breakdown of the new case filings by the type of case. We notice no dramatic shift in the number of case filings that could be taken as evidence for an anticipation of the reform.

Next, we examine whether we are capturing a "president-specific effect", where we are comparing judicial adjudication due to appointments by a particularly idiosyncratic president just before the reform with appointments by the judicial commission. Since, we have judges appointed by 6 different presidents in the dataset, we can examine this claim empirically. We re-estimate equation (1) where we compare state wins and case delay of each president vis-à-vis the judicial

⁶⁷Although, we look at subnational variation in reform intensity and it is unlikely that the 'intensity' of military rule is correlated with the retirement intensity.

⁶⁸The elections took place in February of 2008 which saw Pakistan People's Party (PPP) rise to power (Dawn, 2008). PPP led government assumed office on 25 March 2008 after about 10 years of military rule by General Musharraf.

⁶⁹The same argument can be made that the results are not confounded with the "lawyers movement" (a country-wide protest movement to remove President Musharraf from office).

commission. Table 12 presents these results.⁷⁰ We observe that overall the reform reduced state wins and case delay, irrespective of the specific president that had made the appointments. We also do a similar exercise for chief justices to find that the results are not driven by an idiosyncratic chief justice.⁷¹

We also show the robustness of the results to aggregating the case-level data to a district-time panel (i.e. to the level of variation of the main explanatory variable and its corresponding instrument). Table 13 presents these results. We observe that despite the fall in sample size, the results are similar to what we found in the Table 2.⁷²

We also verify the results through an alternate specification. Specifically, we estimate the following equation:

$$Y_{cjdt} = \theta + \pi After Reform Judge_{cjdt} + \beta_d + \gamma_t + \delta_d t + V'_{cdt}\tau + X'_{dt}\omega + \varepsilon_{cdjt}$$
 (2)

In line with equation (1), Y represents state wins or case delay at the case level. In fact, all variables are identical to those in equation (1), except, the explanatory variable of interest: *After Reform Judge* variable. This is a dummy variable that takes the value of 1 when the case is adjudicated upon by a judge appointed by the judicial commission and zero for the cases adjudicated by judges appointed by the president. π gives us the probability of state wins (or case delay) if the case was decided by the judge selected by the judicial commission relative to presidential appointment.

⁷⁰Also, see Table B.3 (in the appendix) that supplements Table 12 by providing average state wins and case delay for each president vis-à-vis the judicial commission.

⁷¹Throughout the data, we had tenures of multiple chief justices and we show that the results are not driven by a specific Chief Justice (this might become more important in the post-reform period since the CJ heads the judicial commission). See Table B.4 in the appendix for these results.

⁷²In particular, we estimate equation (1) aggregated at district-time level: $Y_{dt} = \theta + \alpha \ Reform \ Intensity_{dt} + \beta_d + \gamma_t + \delta_d \ t + V'_{dt} \tau + W'_{dt} \varphi + \varepsilon_{dt}$

Table 14 presents the results. We obtain qualitatively meaningful negative effect of the reform on state wins and case delay for the full sample and the results are consistent with what we observed earlier for the different type of cases. In Table 14 (column 1), we estimate equation (2) where we compare cases adjudicated by two types of the judges, ceteris paribus on district fixed effects and controls on the full sample. The estimates imply that the after-reform judge is about 10% less likely to rule in favour of the state. Likewise, in Table 14 we also estimate equation (2) across the different types of cases. Consistent with what we observed earlier, most of the effect of new judges on state wins stems from constitutional and land cases. Judges appointed by the judicial commission are about 20% less likely to rule in favour of the state in constitutional and land cases, whereas there is no noticeable impact of new judges on criminal cases (if anything the coefficient estimate is positive for criminal cases).⁷³

Finally, we conduct a 'check for balance' test to examine whether the case or district characteristics are uncorrelated with the treatment variable. To do this, we replace the dependent variable in the baseline equation (1) by all the available case and district characteristics and rerun the baseline specification. Table 15 reports these results. We find that none of the case or district characteristics are correlated with the instrumented reform intensity variable, while we did observe a strong impact of reform when we had considered the State Wins and case delay as the dependent variables.

-

⁷³ Moreover, new judges also take substantially less time to adjudicate on the case (Table 14, Panel B).

⁷⁴ We obtain similar results when we consider both reform intensity or reduced form regression with retirement intensity.

VII. Concluding Remarks

The judicial selection reform of 2010 had a substantial impact on judicial independence and case delay in Pakistan. A 10% increase in judges appointed under the new selection procedure decreased the probability of state wins by about 4 percentage points and case delay by about 0.3 years. The evidence suggests that a key mechanism behind the increase in judicial independence is better enforcement of law in land disputes involving the state.

The reform also seem to impact corruption: the judges selected under the new appointment procedure were less likely to be offered the controversial Prime Minister's Assistance package or be politically active prior to the appointment. We conducted several robustness checks and verified that the results are not driven by potentially confounding factors, differential trends, or any one specific president or chief justice.

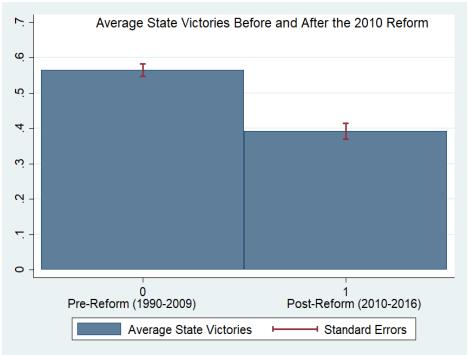
Lastly, consistent with the main findings, a few weeks before this paper was submitted, the ousted prime minister Nawaz Sharif himself blamed the judges' appointed mechanism behind his ouster, where he promised to "change the process to appoint judges if re-elected".⁷⁵

⁷⁵See Figure B.5 in the appendix for the screenshot of the news headline.

VIII. Figures and Tables

Figure 1: State Wins and Case Delay Before and After the Reform

Panel A: State Victories Before and After the Reform



Panel B: Case Delay Before and After the Reform

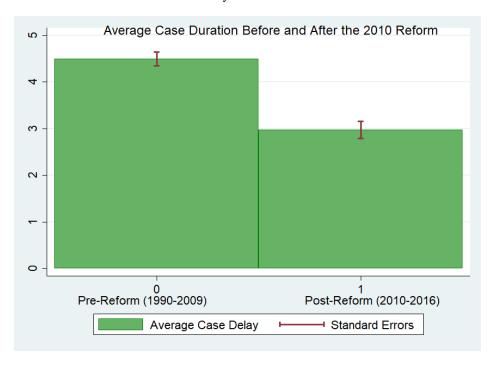
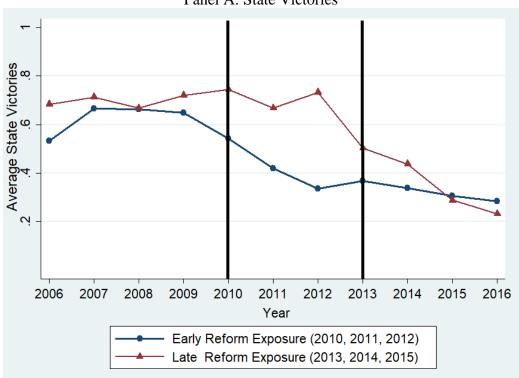


Figure 2: State Wins and Case Delay for Early and Late Reform Adopters







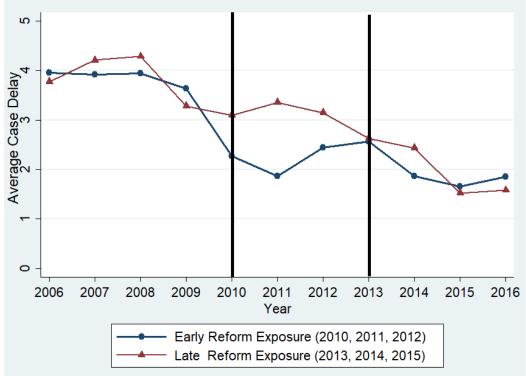
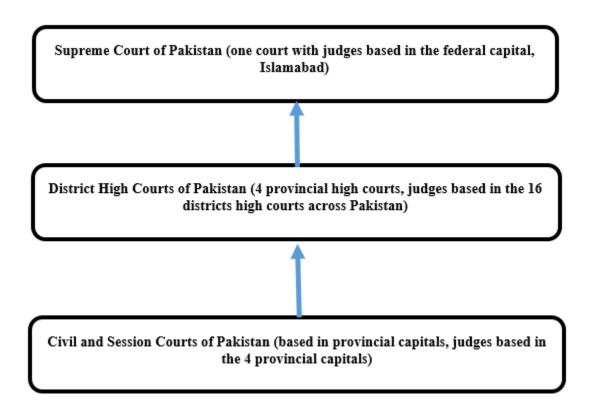


Figure 3: Structure of the Judiciary of Pakistan



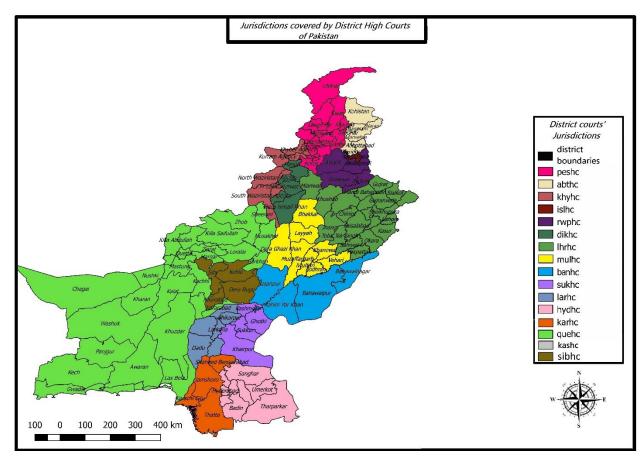
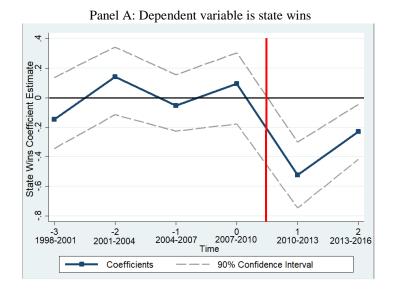
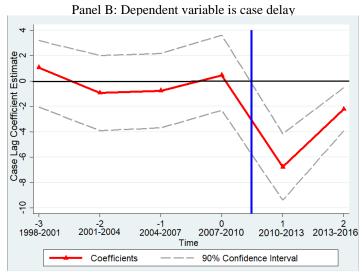


Figure 4: Jurisdictions covered by District High Courts of Pakistan

Note: peshc represents Peshawar High Court Bench, abthc Abbottabad High Court Bench, khyhc Khyber High Court Bench, islhc Islamabad High Court Bench and so forth.

Figure 5: Pre and Post Treatment New Judges

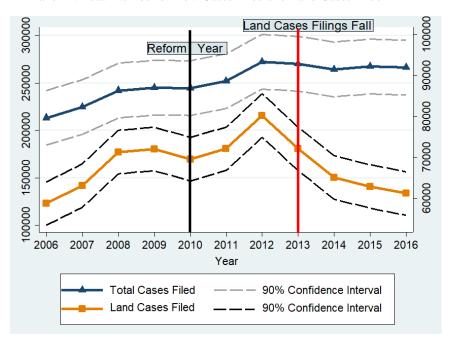




Note: The figure presents the coefficients (along with their 90% confidence interval) in the regression of State Wins and Case Delay on the proportion of new appointments instrumented by the proportion of retirements for all cases in the 3-year intervals (in Panel A and B, respectively). Pre-treatment appointments and retirements are not accompanied by judges selected under the new procedure. The vertical lines mark the timing of the judicial selection reform. The table-form representation of the results of these estimations are presented in Table B.2 in appendix B.

Figure 6: Total Number of Cases Filed and Type of Cases

Panel A: Total Number of New Cases Filed and Land Cases Filed



Panel B: All type of Cases Filed

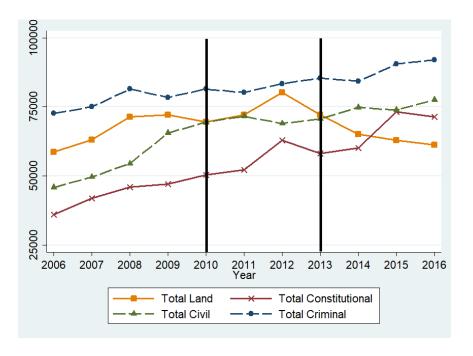


Table 1: Descriptive Statistics of the variables used in the study

Variables	Observations	Mean	Std. Dev.	Min	Max
State Wins	5,035	0.51	0.50	0	1
Case Delay	5,035	3.83	4.10	0	39
Year Decision	5,035	2007.60	5.67	1990	2016
Year Filed	5,035	2003.77	7.53	1967	2016
Constitutional Cases	5,035	0.40	0.49	0	1
Land Cases	5,035	0.34	0.47	0	1
Civil Cases	5,035	0.18	0.39	0	1
Criminal Cases	5,035	0.42	0.49	0	1
Number of Lawyers	5,035	3.04	2.60	1	33
Number of Judges on a case	5,035	1.41	0.71	1	14
Chief Justice in Bench	5,035	0.06	0.24	0	1
Pages of Judgement Order	5,035	3.73	5.54	1	81

Tallet D. Judge Characteristics					
Variables	Observations	Mean	Std. Dev.	Min	Max
Age at Decision	362	52.78	5.08	40.28	61.69
Gender	362	0.95	0.21	0	1
PM Assistance Package	362	0.27	0.44	0	1
Promoted to SC	362	0.07	0.26	0	1
Former Lawyer	362	0.87	0.33	0	1
For. Office Holder Bar. Asso.	362	0.55	0.50	0	1
Former Judge	362	0.12	0.33	0	1
After Reform Judge	362	0.38	0.48	0	1

Panel C: Treatment Variables and District Characteristics (by district-year)					
Variables	Observations	Mean	Std. Dev	Min	Max
Reform Exposure	260	0.32	0.47	0	1
New Judges / Total	260	0.15	0.27	0	1
Retiring at 62 / Total (instrument)	260	0.16	0.26	0	1
Total Judges in district	260	6.65	6.94	1	38
Area (sq. km)	260	4560.31	3676.91	906	13297
Population	260	2888732	2930223	102070.9	1.14E+07
Density (per sq. km)	260	1563.38	2191.83	13.09	9023.83

Table 2: The Effect of Judicial Selection Reform on State Victories

Panel A: OLS and IV Second Stage				
		State \	Victories	_
	(1)	(2)	(3)	(4)
VARIABLES	OLS	OLS	IV, 2 nd Stage	IV, 2 nd Stage
New Judges/Total Judges	-0.365***	-0.402***	-0.388***	-0.499***
	(0.0393)	(0.0753)	(0.0432)	(0.0881)
District Dummies	No	Yes	No	Yes
Time Dummies	No No	Yes	No No	Yes
District Specific Trends	No No	Yes	No	Yes
Controls	No	Yes	No	Yes
Controls	NO	168	NO	168
Observations	5,035	5,035	5,035	5,035
R-squared	0.033	0.069	0.033	0.068
Panel B: IV First Stage				
			(3)	(4)
				Total Judges
VARIABLES			IV 1 ^s	t Stage
Probability of Retirement (Retiring at 62 / Total)			0.946***	0.788***
1 Tobability of Rethement (Rething at 02 / Total)			(0.0216)	(0.0930)
			(0.0210)	(0.0730)
Controls as in Corresponding Columns			No	Yes
1 6				
Observations			5,035	5,035
R-squared			0.945	0.981
F-Statistic			191.88	71.77

Robust standard errors in the parentheses (clustered at district level). Dependent variable is State Victories that is a dummy variable that equals one if the case is ruled in favour of the state and zero otherwise. New Judges/Total Judges is instrumented by proportion of judges reaching the mandatory retirement age of 62 in the district. Controls include all case and district characteristics presented in Table 1. *** p<0.01, ** p<0.05, * p<0.1

Table 3: The Effect of Judicial Selection Reform on Case Duration

Panel A: OLS and IV	Second Stage
---------------------	--------------

	(1)	(2)	(3)	(4)
		Case I	Duration	
VARIABLES	OLS	OLS	IV, 2 nd Stage	IV, 2 nd Stage
New Judges/Total Judges	-3.674***	-2.791***	-3.846***	-3.356***
	(0.233)	(0.725)	(0.236)	(0.821)
District Dummies	No	Yes	No	Yes
Time Dummies	No	Yes	No	Yes
District Specific Trends	No	Yes	No	Yes
Controls	No	Yes	No	Yes
Observations	5,035	5,035	5,035	5,035
R-squared	0.050	0.123	0.050	0.123
Panel B: IV First Stage				
			(3)	(4)
			New Judges/	Total Judges
			IV	IV
VARIABLES			1st Stage	1st Stage

	New Judges/Total Judges		
	IV	IV	
VARIABLES	1st Stage	1 st Stage	
Probability Retirement	0.946***	0.788***	
•	(0.0216)	(0.0930)	
Controls as in Corresponding	No	Yes	
Columns			
Observations	5,035	5,035	
R-squared	0.945	0.981	
F-Statistic	191.88	71 77	

Robust standard errors in the parentheses (clustered at district level). New Judges/Total Judges is instrumented by the proportion of judges reaching the mandatory retirement age of 62 in the district. Controls include all case and district characteristics presented in Table 1. *** p<0.01, ** p<0.05, * p<0.1

Table 4: The Effect of Judicial Selection Reform by type of case

Panel A: Reform and State Wins by type of the case

	State Wins				
	(1)	(2)	(3)	(4)	
VARIABLES	Constitutional	Land Cases	Criminal Cases	Civil Cases	
	Cases				
New Judges / Total Judges	-0.467***	-0.540***	-0.229	-	
	(0.129)	(0.191)	(0.172)	-	
District Dummies	Yes	Yes	Yes	-	
Time Dummies	Yes	Yes	Yes	-	
District Specific Trends	Yes	Yes	Yes	-	
Controls	Yes	Yes	Yes	-	
Observations	1,770	1,401	1,864	-	
R-squared	0.168	0.177	0.067	-	

Panel B: Reform and Case D	uration by type of t	he case		
	(1)	(2)	(3)	(4)
		Case D	uration	
VARIABLES	Constitutional	Land	Criminal Cases	Civil Cases
	Cases	Cases		
New Judges / Total Judges	-2.907***	-3.583***	-3.253*	-4.225**
	(1.030)	(0.942)	(1.698)	(1.692)
District Dummies	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	1,770	1,401	1,864	923
R-squared	0.135	0.144	0.196	0.159

Robust standard errors in parentheses (clustered at district level). The instrument and controls are identical to those in Table 2. Civil cases do not have state as a party so the entries in Panel A for civil cases are omitted.

Table 5: Difference in Observed Characteristics of Old and New Judges

Variables	Old Judge	New Judge	Difference	(p-value)
Gender	0.97	0.93	0.03	0.19
Former Lower Court Judge	0.11	0.15	-0.04	0.27
Former Lawyer	0.89	0.86	0.03	0.36
Age at Decision	52.31	53.58	-1.27	0.02
PM Assistance Package	0.36	0.09	0.28	0.00
Former Office Holder Bar Asso.	0.71	0.27	0.44	0.00

Table 6: The Effect of Judicial Selection Reform on Judge Characteristics

VARIABLES	Age	Promote	Former	Former	PM Ass.	Former
			Lawyer	Judge	Package	Bar Ass.
	(1)	(2)	(3)	(4)	(5)	(6)
New Judges/Total Judges	1.577	-0.0931	-0.0244	0.108	-0.186*	-0.338*
	(2.053)	(0.125)	(0.119)	(0.128)	(0.106)	(0.198)
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,035	5,035	5,035	5,035	5,035	5,035
R-squared	0.154	0.251	0.101	0.089	0.165	0.158

Robust standard errors in parentheses. The New Judges/Total Judges is instrumented by fraction of judges reaching the mandatory retirement age. Case and district controls variables are identical to those in the baseline regression. The plot and bar association membership regressions (column 5 and 6) have age as a control variable.

Table 7: Effect of the reform on State Wins in provincial capitals and the rest of the districts

	State	Wins
VARIABLES	Provincial Capitals	Non-Provincial Capitals
New Judges / Total Judges	-0.700*** (0.205)	-0.385*** (0.0970)
District Dummies	Yes	Yes
Time Dummies	Yes	Yes
District Specific Trends	Yes	Yes
Controls	Yes	Yes
Observations	3,742	1,293
R-squared	0.050	0.208

Robust standard errors in parentheses (clustered at district level). The instrument and controls are identical to Table 2.

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

Table 8: Decision on Merit by Presidentially and Judicial Commission appointed judges

Panel A: Decisions on Merit - Coding by Law Firm 1

Variables	Pre-Reform	Post-Reform	Difference	(p-value)
All Cases	0.49	0.66	-0.17	0.00
Constitutional Cases	0.50	0.53	-0.03	0.88
Land Cases	0.40	0.76	-0.36	0.00
Criminal Cases	0.61	0.63	-0.02	0.89
Civil Cases	0.39	0.60	-0.22	0.03

Panel B: Decisions on Merit - Coding by Law Firm 2

Variables	Pre-Reform	Post-Reform	Difference	(p-value)
All Cases	0.46	0.63	-0.17	0.00
Constitutional Cases	0.50	0.59	-0.09	0.65
Land Cases	0.38	0.73	-0.35	0.00
Criminal Cases	0.60	0.57	0.03	0.74
Civil Cases	0.40	0.58	-0.18	0.01

Note: The comparison of merit decisions in cases adjudicated by a random sample of 500 cases from the sample of 5035 cases coded by the two law firms (250 pre-reform and 250 post-reform cases). Correlation coefficient between the two firms' coding of all merit cases is 0.86. The largest increase of about 35% in merit decisions for land disputes by judges appointed by the judicial commission is observed across both the law firms.

Table 9: Falsification Tests for State Wins and Case Lag

Panel A: State Wins is the depe	endent variable				
	(1)	(2)	(3)	(4)	(5)
VARIABLES	1990-2016		Pre-Treatment S	Sample 1990-200	9
Retirement at 62 / Total	-0.399***	0.0565	0.0801	0.0750	0.101
	(0.0618)	(0.0621)	(0.0728)	(0.0763)	(0.0725)
District Dummies	Yes	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	No	Yes	Yes	Yes
Judge Controls	Yes	No	No	Yes	Yes
District Controls	Yes	No	No	No	Yes
Observations	5,035	3,066	3,066	3,066	3,066
R-squared	0.069	0.028	0.051	0.054	0.058
Panel B: Case Delay is the depo	endent variable				
	(1)	(2)	(3)	(4)	(5)
VARIABLES	1990-2016		Pre-Treatmen	t Sample 1990-2	009
Retirements at 62 / Total	-2.727***	-0.762	-0.532	-0.800	-0.427
Retirements at 02 / Total	(0.617)	(1.531)		(1.488)	(1.473)
D' ' ' ' ' D ' '	37	3 7	37	3 7	3 7
District Dummies	Yes	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes	Yes
Case Controls	Yes	No	Yes	Yes	Yes
Judge Controls	Yes	No	No	Yes	Yes
District Controls	Yes	No	No	No	Yes
Observations	5,035	3,066	3,066	3,066	3,066
	0.124	0.051	0.064	0.051	0.076

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

Table 10: Comparison of Unpublished and Published Cases

Panel A: Before Reform Sindh District High Courts

Variables	Unpublished	Published	Difference	(p-value)
State Wins	0.53	0.52	0.01	0.77
Case Delay	4.13	4.11	0.02	0.92
Constitutional Case	0.38	0.41	-0.03	0.26
Land Case	0.34	0.32	0.02	0.36
Criminal Case	0.40	0.41	-0.01	0.44
Civil Case	0.19	0.18	0.01	0.58
Number of Lawyers	3.24	3.18	0.06	0.50
Number of Judges	1.34	1.32	0.02	0.49
Chief Justice in Bench	0.07	0.06	0.01	0.50
Pages of Judgement Order	3.82	3.73	0.09	0.66

Panel B: After Reform Sindh District High Courts

Variables	Unpublished	Published	Difference	(p-value)
State Wins	0.29	0.32	-0.03	0.59
Case Delay	3.09	3.07	0.02	0.93
Constitutional Case	0.39	0.40	-0.01	0.27
Land Case	0.36	0.35	0.01	0.59
Criminal Case	0.42	0.44	-0.02	0.48
Civil Case	0.20	0.19	-0.01	0.91
Number of Lawyers	3.03	3.04	-0.01	0.96
Number of Judges	1.43	1.41	0.02	0.26
Chief Justice in Bench	0.06	0.07	-0.01	0.51
Pages of Judgement Order	3.69	3.76	-0.07	0.66

Note: Sindh high court data includes the district high courts of Sukkur, Larkana, Karachi and Hyderabad. A random sample of 500 unpublished cases from Sindh is compared with the 1526 published cases for Sindh used in the analysis.

Table 11: Effect of the reform on State Wins within the Democratic Period

	State Wins					
	Democratic Period: 2009 to 2016					
	(1)	(2)	(3)	(4)		
VARIABLES	OLS	OLS	IV, 2 nd Stage	IV, 2 nd Stage		
New Judges / Total Judges	-0.378*** (0.0523)	-0.361*** (0.0693)	-0.434*** (0.0576)	-0.419*** (0.0775)		
District Dummies	No	Yes	No	Yes		
Time Dummies	No	Yes	No	Yes		
District Specific Trends	No	Yes	No	Yes		
Controls	No	Yes	No	Yes		
Observations	2,148	2,148	2,148	2,148		
R-squared	0.039	0.102	0.038	0.102		

Robust standard errors in parentheses (clustered at district level)

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

Table 12: Effect of Reform on State Wins and Case Lag (Judicial Commission vs last 6 Presidents)

Panel A: State Wins by president									
-	State Wins								
	Pres. Zardari	Pres. Musharraf	Pres. Tarar	Pres. Leghari	Pres. Khan	Pres. Haq			
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)			
New Judges / Total Judges	-0.438***	-0.578***	-0.384***	-0.425***	-0.525***	-0.474***			
	(0.121)	(0.124)	(0.117)	(0.146)	(0.165)	(0.172)			
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes			
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes			
District Specific Trends	Yes	Yes	Yes	Yes	Yes	Yes			
Controls	Yes	Yes	Yes	Yes	Yes	Yes			
Observations	1,786	2,684	2,272	2,240	1,468	1,409			
R-squared	0.091	0.081	0.092	0.122	0.113	0.115			

Panel B: Case Duration by president										
	Case Lag									
	Pres. Zardari	Pres. Musharraf	Pres. Tarar	Pres. Leghari	Pres. Khan	Pres. Haq				
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)				
New Judges / Total Judges	,	-4.244***	-1.556	-3.172***	-2.523**	-2.772**				
	(1.158)	(1.138)	(1.079)	(1.056)	(1.122)	(1.210)				
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes				
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes				
District Specific Trends	Yes	Yes	Yes	Yes	Yes	Yes				
Controls	Yes	Yes	Yes	Yes	Yes	Yes				
Observations	1,786	2,684	2,272	2,240	1,468	1,409				
R-squared	0.134	0.188	0.168	0.258	0.145	0.133				

Robust standard errors in parentheses (clustered at district level). The instrument and controls are identical to those in Table 2. For average State Wins and Case Delay for each president, see Table B.2 in the appendix.

^{***} p<0.01, ** p<0.05, * p<0.1

Table 13: Effect of Reform on State Wins and Case Lag on aggregated district-time panel

	Stat	te Wins	Case Delay		
	(1)	(2)	(3)	(4)	
VARIABLES	OLS	IV, 2 nd Stage	OLS	IV, 2 nd Stage	
New Judges/Total Judges	-0.535*** (0.0645)	-0.548*** (0.0593)	-2.882*** (0.552)	-2.134*** (0.603)	
	(0.0043)	(0.0393)	(0.553)	(0.003)	
District Dummies	Yes	Yes	Yes	Yes	
Time Dummies	Yes	Yes	Yes	Yes	
District Specific Trends	Yes	Yes	Yes	Yes	
Controls	Yes	Yes	Yes	Yes	
Observations	260	260	260	260	
R-squared	0.656	0.652	0.636	0.681	

Robust standard errors in parentheses (clustered at district level). New Judges/Total Judges is instrumented by judges reaching the mandatory retirement age of 62 in the district as a proportion of total judges. The table gives results of estimating district-time aggregation of equation (1).

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

Table 14: The Effect of Judicial Selection Reform (equation 2)

0.057

R-squared

Panel A: Reform and State Wins by type of the case State Wins (2) (1) (3) (4) All Sample Land Cases **VARIABLES** Constitutional **Criminal Cases** Cases -0.0911* -0.214*** -0.220*** After Reform Judge 0.0255 (0.0448)(0.0448)(0.0565)(0.0993)**District Dummies** Yes Yes Yes Yes Time Dummies Yes Yes Yes Yes **District Specific Trends** Yes Yes Yes Yes Controls Yes Yes Yes Yes Observations 5,035 1,770 1,401 1,864

0.146

Panel B: Reform and Case Lag by type of the case									
	Case Lag								
	(1)	(2)	(3)	(4)					
VARIABLES	All Sample	Constitutional	Land Cases	Criminal Cases					
		Cases							
After Reform Judge	-3.226***	-3.158***	-3.344***	-3.671***					
	(0.340)	(0.361)	(0.499)	(0.396)					
District Dummies	Yes	Yes	Yes	Yes					
Time Dummies	Yes	Yes	Yes	Yes					
District Specific Trends	Yes	Yes	Yes	Yes					
Controls	Yes	Yes	Yes	Yes					
01	5.025	1.770	1 401	1.064					
Observations	5,035	1,770	1,401	1,864					
R-squared	0.167	0.103	0.188	0.240					

Robust standard errors in parentheses (clustered at district level) *** p<0.01, ** p<0.05, * p<0.1 0.063

0.152

Table 15: The Effect of Judicial Selection Reform on Case and District Characteristics

VARIABLES	(1) Constituti onal Case	(2) Land Case	(3) Criminal Case	(4) # Pages Judgmen	(5) Chief Justice in	2	(7) Population	(8) Population Density
				t Order	Case	on Case		
New Judges/Total Judges	-0.0294 (0.124)	-0.111 (0.111)	0.111 (0.131)	-0.240 (1.949)	0.0416 (0.0440)	-0.0910 (0.356)	-412,681 (1.72e+06)	541.3 (1,389)
District Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations R-squared	5,035 0.149	5,035 0.128	5,035 0.216	5,035 0.122	5,035 0.015	5,035 0.069	5,035 0.069	5,035 0.107

Robust standard errors in parentheses (clustered at district level). New Judges/Total Judges is instrumented by judges reaching the mandatory retirement age of 62 in the district as a proportion of total judges. Control variables are similar to those in the baseline regression.

*** p<con0.01, ** p<0.05, * p<0.1

IX. Appendix A: Variable Definitions and Sources

State Wins = Average State Victories in a district for a given year. The law firms coded this variable based on the following rubric: it takes the value of 1 in case of a "state victory and zero in case of a state loss". This variable is constructed based on judgement orders compiled from cases in published law journals (PLD, PLJ, CLC, NLR, CrLJ, YLR, PLR) and high court websites.

Case Lag = It is the difference between case decision year and case filing year. This variable is also based on text of the judgement orders compiled from high court websites and published law journals (PLD, PLJ, CLC, NLR, CrLJ, YLR, PLR).

Reform Intensity (New Judges / Total Judges) = It is the fraction of judges selected under the new selection procedure. Information on the new appointments is obtained from judicial administrative records obtained from Registrar Offices of the high courts. Data on total judges in each district high court is obtained from High Courts Annual Reports submitted to the Ministry of Law, Justice and Human Rights, Government of Pakistan.

Retiring at 62 / Total Judges (instrument) = It is the fraction of judges who reach the mandatory retirement age of 62 (in the post reform period). Information on judge retirements is obtained from judicial administrative records obtained from Registrar Offices of the high courts. Data on total judges in each district high court is obtained from High Courts Annual Reports submitted to the Ministry of Law, Justice and Human Rights, Government of Pakistan.

Reform Exposure = It is a dummy variable that switches on when a new judge under the new selection procedure is appointed in that district (not used in the final analysis). Specifically, this variable takes the value of 1 in the district where a new judge is appointed under the new selection procedure. This variable is constructed using data gathered from the judicial administrative data from the Registrar Offices of the high courts.

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)). See Figure B.1 and B.2 for examples.

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.

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

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.

PM Assistance Package = It is a dummy variable for the judge who received a (residential) plot as part of the PM Assistance Package and zero otherwise. This is obtained from the list of names available in Public Accounts Committee report "List of judges allotted plots since 1996".

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.

After Reform Judge = It is a dummy variable that takes the value of 1 if the case was decided by a judge who was selected by the judicial commission and zero otherwise (i.e. if the judge presidentially appointed).

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

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

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

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

X. Appendix B: Additional Figures and Tables

Figure B.1: Example of Raw Data (Case and Judicial Administrative Data)

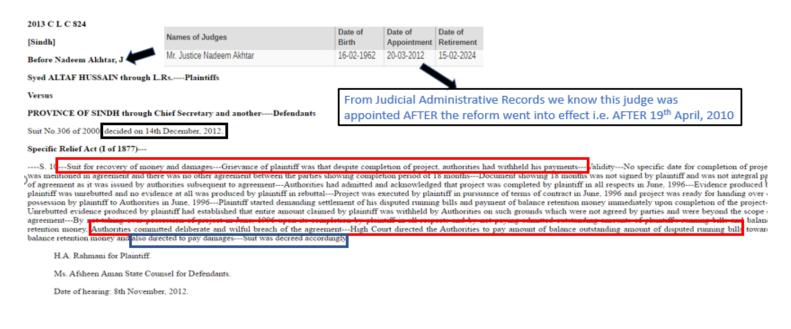


Figure B.2: Example of Raw Data (Land Grab Case)

2005 C L C 745

[Karachi]

Before Sabihuddin Ahmed and Khilji Arif Hussain, JJ

KHALID MOHSIN-Petitioner

versus

SECRETARY, MINISTRY OF DEFENCE, Government of Pakistan, Islamabad and 2 others---Respondents

Constitutional Petition No.59 of 1988, decided on 23rd November, 2004.

West Pakistan Land Revenue Act (XVII of 1967)---

Hassan Akbar for Petitioner.

Nadeem Azhar Siddiqui, D.A.-G. and S. Tariq Ali, Federal Counsel for Respondents.

Ahmed Pirzada, Addl. A.-G.

Date of hearing: 29th August, 2004.

Figure B.3: Example of Raw Data (Payment on land not made by government)

2009 C L C 1199

[Karachi]

Before Gulzar Ahmed and Malik Muhammad Aqil, JJ

MORRIS TANVIR---Petitioner

Versus

FEDERATION OF PAKISTAN through Secretary Ministry of Defence, Islamabad and 2 others-Respondents

Constitutional Petition No.D-2331 of 2006, decided on 16th July, 2009.

Transfer of Property Act (IV of 1882)-

...S. 54...Cantonment Land Administration Rules, 1937. Rr 15 & 16...Constitution of Paksstan (1973). Art 199...Constitutional petition...Allotment...Plot in question was amenity plot reserved for school and petitioner contended that he purchased the same from a foreigner. Greenance of petitioner was that authorities were not issuing lease in his favour. Validity...Sale of land for any such purpose without definite order of Central Government was prohibited under R. 27 or Cantonment Land Administration Rules. 1937. for manimum period of 30 years and maximum period of 90 years through public assetion for building sites...—Plots meant for municipal services and amenities could not be leased, wild-leased, wild or transferred to any person or to any one class of persons for the use and enjoyment rather it had to remain as government property for public purposes for unkindered free access, use and enjoyment of public at large...—In no case plots meant for municipal services and amenities could be termed as building sites nor there could be any exceptional reasons for disposal of such land by private agreement or otherwise...—There was no document of sale and purchase of plot in question between Definee Housing Authority and the foreigner in accordance with \$5.54 of Transfer of Property Act. 1852...—Agreement to sell relied upon by petitioner was no agreement in the eyes of fav as no authority had been shown nor any seemed to exist to sign the same on behalf of the foreigner...—Transfer documents relied upon by petitioner was no agreement in the eyes of fav as no authority had been shown nor any seemed to exist to sign the same on behalf of the seemed to High Court that fraud had been played by petitioner and officials of Defence Housing Authority for usuaping and misappropriating valuable government property and there had to be an accountability of the same.—High Court directed Federal Government to hold inquiry in the whole affair and to take action and directed petitions to authorities for issuance of lease deed-pe

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

S.A. Jalib Chaudhry for Petitioner

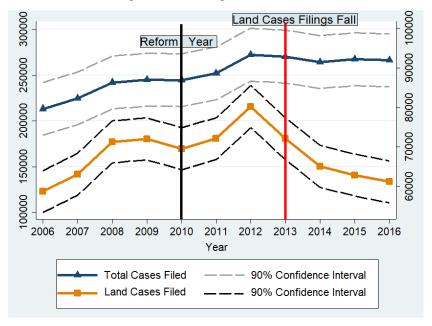
Ashiq Raza, Dy. A.-G. along with Hamid Niaz, Dy. Military Estate Officer for Respondents Nos.1 and 3.

Raja Sikandar Khan Yasir for Respondent No.2.

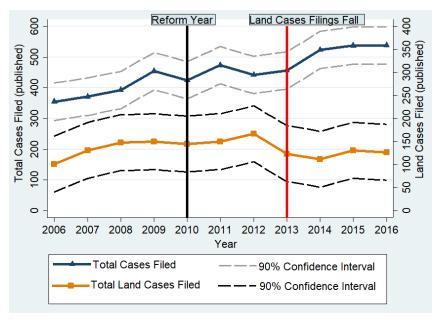
Date of hearing: 7th May, 2009.

Figure B.4: Total and Land cases filed (all vs published cases)

Panel A: Total Number of New Cases Filed and Land Cases Filed (published and unpublished cases)



Panel B: Number of New Cases Filed and Land Cases Filed (published cases)



Note: Panel A reproduces Figure 6 (Panel A) that present the universe of new total and land cases filed in the district high courts of Pakistan. Panel B plots the new case filings per year for total and land cases published according to the law journals which we used in the analysis.

Figure B.5: News Headline from 7th May 2018



Will change process to appoint judges if re-elected: Nawaz



Table B.1: Outcome variables and Case Characteristics - Comparison of Firm 1 and Firm 2

Variables	Firm 1	Firm 2	Difference	Correlation (ρ)
State Wins	0.51	0.56	-0.05	0.89
Case Delay	3.84	3.85	-0.01	0.99
Constitutional	0.39	0.40	-0.01	0.89
Land Cases	0.34	0.31	0.03	0.94
Criminal Cases	0.42	0.39	0.03	0.93
Civil Cases	0.18	0.21	-0.03	0.94
# of Lawyers	3.04	3.09	-0.05	0.94
# of Judges	1.42	1.44	-0.02	0.87
CJ in Bench	0.06	0.08	-0.02	0.83
Pg. of Judgement	3.74	3.70	0.06	0.97

Note: The table compares the outcome variables and case characteristics for the two law firms for the same 5035 cases. Firm 1 is the data used in the analysis. Means, their difference, and correlation coefficient between the two law firms coding of case characteristics variables are presented.

Table B.2: The Effect of Judicial Selection Reform in 3-year case intervals (Plotted in Figure 5)

Panel A: Reform and State Wins (coefficients on cases in 3-year intervals)

	State Wins				
	(1)	(2)	(3)		
VARIABLES	Coefficient	90% Confi	dence Interval		
1998-2001	-0.146162	-0.343162	0.1374181		
2001-2004	0.142690	-0.113942	0.3426905		
2004-2007	-0.054171	-0.225469	0.1554203		
2007-2010	0.096328	-0.177054	0.3043982		
2010-2013	-0.52235**	-0.744616	-0.3001012		
2013-2016	-0.22964**	-0.415226	-0.0440588		
District Dummies	Yes	Yes	Yes		
Time Dummies	Yes	Yes	Yes		
Controls	Yes	Yes	Yes		

Panel B: Reform and Case Du	ration (coefficient	s on cases in 3-y	ear intervals)	
	(1)	(2)	(3)	
		Case Du	ration	
VARIABLES	Coefficient	90% Con	fidence Interval	
1998-2001	1.060641	-2.05805	3.179297	
2001-2004	-0.940817	-3.90429	2.022653	
2004-2007	-0.761548	-3.68865	2.165557	
2007-2010	0.450706	-2.30565	3.604189	
2010-2013	-6.772732**	-9.38917	-4.156457	
2013-2016	-2.220871*	-3.91051	-0.5312254	
District Dummies	Yes	Yes	Yes	
Time Dummies	Yes	Yes	Yes	
Controls	Yes	Yes	Yes	

Robust standard errors in parentheses (clustered at district level). The instrument and controls are identical to those in Table 2 (except before 2010 appointments occur under the same selection procedure). *** p<0.01, ** p<0.05, * p<0.1

Table B.3: Average Case duration and State Wins by Appointment Body

Appointment Body	Av. Case Duration	Av. State Wins	Observations
Judicial Commission (2010-2016)	1.65	0.38	1366
President Zardari (2008-2010)	4.92	0.48	420
President Musharraf (2001-2008)	4.90	0.53	1315
President Tarar (1998-2001)	4.10	0.54	906
President Leghari (1993-1997)	4.88	0.63	872
President Khan (1988-1993)	3.34	0.64	101
President Haq (1978-1988)	4.09	0.56	43

Table B.4: The Effect of Judicial Selection Reform on State Wins and Case Delay by Chief Justice

Panel A:	State	Wins	hv	Chief In	stice ((CI)	
I union a s.	Diane	1 1 1110	$\boldsymbol{\sigma}$	CILICI JU	Bucc 1	~ 0 1	

		State	Wins	
	CJ Chaudhary	CJ Jilani	CJ Mulk	CJ Jamali
VARIABLES	(1)	(2)	(3)	(4)
New Judges/Total Judges	-0.519***	-0.502***	-0.480***	-0.186
	(0.112)	(0.169)	(0.186)	(0.143)
District Dummies	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes
District Specific Trends	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	4,108	3,867	3,801	3,582
R-squared	0.057	0.060	0.065	0.076

Panel B: Case Delay by Chief Justice

New Judges/Total Judges	Case Lag				
	-4.472*** (1.309)	-1.463 (1.799)	-2.273* (1.370)	0.618 (0.802)	
District Dummies	Yes	Yes	Yes	Yes	
Time Dummies	Yes	Yes	Yes	Yes	
District Specific Trends	Yes	Yes	Yes	Yes	
Controls	Yes	Yes	Yes	Yes	
Observations	4,108	3,867	3,801	3,582	
R-squared	0.102	0.100	0.095	0.114	

Robust standard errors in parentheses (clustered at district level). The instrument and controls are identical to those in Table 2. Chief Justice is the head of judicial commission. Here we compare State Wins and Case Delay during tenure of different Chief Justices after the reform (relative to presidential appointment).

XI. References

Abbasi, A. (2017). Plots allotment to judges a favour, misconduct: ex-CJ. Retrieved February 24, 2018, from https://www.thenews.com.pk/print/200999-Plots-allotment-to-judges-a-favour-misconduct-ex-CJ

Ahmed, S. (2016). Justice delayed is justice denied. Retrieved March 24, 2018, from https://www.dawn.com/news/1303235

Almeida, C. (2018). Re-centralisation. Retrieved March 25, 2018, from https://www.dawn.com/news/1397406/re-centralisation

Amnesty International (1982). Pakistan human rights violations and decline of rule. Amnesty International Publications, London, UK.

Asad, M. (2017). Govt challenges cancellation of plots for high-profile figures. Retrieved June 8, 2018, from https://www.dawn.com/news/1377708

Ash, E., & MacLeod, W. B. (2018). The performance of elected officials: Evidence from state supreme courts. National Bureau of Economic Research.

Arshad, Javed (2017). Lahore High Court Bar Council. Lahore

Avis, E., Ferraz, C., and Finan, F. (2018). Do government audits reduce corruption? Estimating the impacts of exposing corrupt politicians. Journal of Political Economy, Forthcoming.

Basu, P. P. (2008). Post-Benazir Pakistan: Quo Vadis?. Jadavpur Journal of International Relations, 11(1), pp. 317-323.

Besley, T. (2005). Political selection. The Journal of Economic Perspectives, 19(3), pp. 43-60.

Besley, T. and Abigail Payne, A., (2013). Implementation of Anti-Discrimination Policy: Does Judicial Selection Matter?. American Law and Economics Review, 15(1), pp. 212-251.

Boehm, Johannes (2015) The impact of contract enforcement costs on outsourcing and aggregate productivity. CEP Discussion Paper, No. 1382. Centre for Economic Performance, London School of Economics and Political Science, London, UK.

Bobonis, G. J., Cámara Fuertes, L. R., & Schwabe, R. (2016). Monitoring Corruptible Politicians. American Economic Review, 106(8), pp. 2371-2405.

Bose, S., & Jalal, A. (2004). Modern South Asia: history, culture, political economy. Psychology Press.

Buchanan, James M. (1974). "Good Economics-Bad Law." Virginia Law Rev. 60 (March): 483-92.

Chemin, Mattheiu. (2009). The impact of the judiciary on entrepreneurship: Evaluation of Pakistan's "Access to Justice Programme". Journal of Public Economics, 93(1), 114-125.

Chen, D. L., Moskowitz, T. J., & Shue, K. (2016). Decision Making Under the Gambler's Fallacy: Evidence from Asylum Judges, Loan Officers, and Baseball Umpires. The Quarterly Journal of Economics, 131(3), 1181-1242.

Constitution of Pakistan (2017). Judicial Selection Procedure. Retrieved on 04, September 2017: https://pakistanconstitutionlaw.com/18th-amendment-2010/

Dawn (2017) Don't malign the judiciary if the verdict is against you: CJP hits out at critics. Retrieved March 27, 2018, from https://www.dawn.com/news/1376971

Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2003). Courts. The Quarterly Journal of Economics, 118(2), 453-517.

La Porta, R., Lopez-de-Silanes, F., Pop-Eleches, C., & Shleifer, A. (2004). Judicial checks and balances. Journal of Political Economy, 112(2), 445-470.

Iyer, L., & Mani, A. (2012). Traveling agents: political change and bureaucratic turnover in India. *Review of Economics and Statistics*, 94(3), 723-739.

Economist, The (2018). Pakistan's top court is eager to take on any brief. (2018, March 28). Retrieved from https://www.economist.com/news/asia/21739721-just-long-it-doesnt-have-say-boo-army-pakistans-top-court-eager-take-any

De Montesquieu, C. L. D. S. (1748). Esprit des lois. Libr. de F. Didot Frères.

Ferraz, C., & Finan, F. (2008). Exposing corrupt politicians: the effects of Brazil's publicly released audits on electoral outcomes. The Quarterly Journal of Economics, 123(2), 703-745.

Gadugah, N. (2017, November 07). Rawlings, 415 past gov't officials, institutions grabbed state lands. Retrieved February 23, 2018, from https://www.myjoyonline.com/news/2017/November-7th/rawlings-jake-414-past-govt-officials-institutions-grabbed-state-lands.php

Guerriero, C. (2011). Accountability in government and regulatory policies: theory and evidence. Journal of Comparative Economics, 39(4), 453-469.

Hanssen, F. A. (1999). The effect of judicial institutions on uncertainty and the rate of litigation: The election versus appointment of state judges. The Journal of Legal Studies, 28(1), 205-232.

Hessami, Z. (2018). Accountability and incentives of appointed and elected public officials. *Review of Economics and Statistics*, 100(1), 51-64.

Hodler, R., & Raschky, P. A. (2014). Regional favoritism. The Quarterly Journal of Economics, 129(2), 995-1033.

Hayek, Friedrich A. von. (1960). The Constitution of Liberty. Chicago: Univ. Chicago Press.

Iqbal, N. (2015). Mode of judges' appointment under 18th Amendment criticised. Retrieved March 26, 2018, from https://www.dawn.com/news/1184455

Ijaz, S. (2014). Judicial Appointments in Pakistan: Coming Full Circle. LUMS Law Journal, 1(1), 86-95.

Islamabad Times. (2018). Supreme Court to remain open on Sundays, says CJP. Retrieved from https://timesofislamabad.com/13-Jan-2018/supreme-court-to-remain-open-on-sundays-says-cjp

Khan, M. J. (2017). Sitting Honourable Judges Baluchistan High Court. Retrieved September 11, 2017, from https://bhc.gov.pk/judges/hon-judges

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The economic consequences of legal origins. Journal of economic literature, 46(2), 285-332.

Lim, C. S. (2013). Preferences and incentives of appointed and elected public officials: Evidence from state trial court judges. The American Economic Review, 103(4), 1360-1397.

Madison, James, Alexander Hamilton, and John Jay. [1788] 1961. The Federalist Papers, edited by Clinton L. Rossiter. New York: New American Library.

Madani, A. (2017). Public Accounts Committee: End farmlands for generals, plots for bureaucrats. Retrieved February 28, 2018, from https://tribune.com.pk/story/68256/list-of-judges-allotted-plots-since-1996/

Malik, H. (2018, January 26). Judges 'cannot be exonerated' for delayed justice. Retrieved March 24, 2018, from https://tribune.com.pk/story/1618356/1-judges-cannot-exonerated-delayed-justice/

Mauro, P. (1995). Corruption and growth. The quarterly journal of economics, 110(3), pp. 681-712.

Naqvi, F. (1990). Lions beneath the Throne: Judiciary and Politics in Zia's Pakistan (Unpublished thesis). https://catalog.princeton.edu/catalog/dsp016969z149t

News, The (2010) Law minister lashes out at Punjab govt, judges. Retrieved from https://www.thenews.com.pk/archive/print/245745-law-minister-lashes-out-at-punjab-govt-judges

News, The. (2018). Complete IHC order of Khawaja Asif disqualification case. Retrieved from https://www.thenews.com.pk/latest/309427-complete-ihc-order-of-khawaja-asif-disqualification-case

News, Geo. (2018). Will change process to appoint judges if re-elected: Nawaz. Retrieved May 31, 2018, from https://www.geo.tv/latest/194342-will-change-process-to-appoint-judges-if-re-elected-nawaz

Palumba, G., Giupponi, G., Nunziata, L., & Sanguinetti, J. M. (2013). The economics of civil justice: New cross-country data and empirics. OECD Econ Department Working Papers No. 1060.

Perlez, Jane and Gall, Carlotta (2008). "In Pakistan, Musharraf's Party Accepts Defeat – New York Times". The New York Times. Retrieved on 04, September 2017: http://www.nytimes.com/2008/02/20/world/asia/20pakistan.html

Ponticelli, J., & Alencar, L. S. (2016). Court enforcement, bank loans, and firm investment: evidence from a bankruptcy reform in Brazil. The Quarterly Journal of Economics, 131(3), 1365-1413.

Pound, R. (1963). The spirit of the common law. Transaction Publishers.

Registrar Office (2017). List of Judges. Supreme Court of Pakistan.

Shvets, J. (2016). Presidential Control of the Judiciary via the Appointment Power: Evidence from Russia. The Journal of Law, Economics, and Organization, 32(3), 478-507.

Waqar, Sheikh (2016). Supreme Court Bar Council. Islamabad.

Sattar, B. (2017). Legal eye: Daylight robbery. Retrieved June 8, 2018, from https://www.thenews.com.pk/print/240307-Legal-eye-Daylight-robbery

Tavernise and Masood (2010) "Pakistan Weighs Changes to Revise Constitutio" www.nytimes.com/2010/04/07/world/asia/07pstan.html

Tidmarsh, J., (2009). Resolving Cases on the Merits. Denver Law Review, 87, p. 407.

Times of India (2018). Union minister Giriraj Singh booked in land-grab case - Times of India. (2018, February 08). Retrieved February 24, 2018, from https://timesofindia.indiatimes.com/city/patna/giriraj-booked-in-land-grab-case/articleshow/62841673.cms

Tribune, E. (2012). Public Accounts Committee: End farmlands for generals, plots for bureaucrats. Retrieved May 7, 2018, from https://tribune.com.pk/story/481978/public-accounts-committee-end-farmlands-for-generals-plots-for-bureaucrats/

Haq, Ikram (2017). Supreme Court Bar Council. Islamabad.

Muhammad, Farhan (2017). Bahawalpur High Court Bar Council Records. Bahawalpur.

Winters, Matthew and Weitz-Shapiro, Rebecca (2013). "Lacking information or condoning corruption: When will voters support corrupt politicians?" Comparative Politics 45 (4):418–436.

Voigt, S. (2008). The economic effects of judicial accountability—cross-country evidence. European Journal of Law and Economics, 25(2), 95–123.

Voigt, S. (2013). How (not) to measure institutions. Journal of Institutional Economics, 9(1), 1-26.

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

Zafar, A. (2012). How true judicial independence can be achieved. Retrieved March 24, 2018, from https://tribune.com.pk/story/372183/how-true-judicial-independence-can-be-achieved/