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Decoding the Code of Civil Procedure: Do Judiciaries Matter for Growth?

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Abstract:
This paper attempts to measure the causal impact of the speed of judiciaries on economic activity by using two novel instrumental variables measuring judicial procedural ambiguity and complexity. First, I find that temporally exogenous conflicting judicial decisions taken in India due to the Code of Civil Procedure's ambiguity lead to higher expected trial duration as judges are required to spend considerable time in choosing between several conflicting views. Second, I find that Indian High Court amendments complicating procedures to treat a case are related to higher trial duration. By using spatial and temporal variations in the occurrence of conflicting decisions and enactment of amendments as instrumental variables, I am able to measure the impact of judicial speed on credit markets, agricultural development and manufacturing performance.

I Introduction

This paper contributes to the empirical literature on the effects of institutions on economic performance. One key question in this literature is causation, because institutions are arguably endogenous. The first issue when relating institutions to economic performance is one of reverse causality. For example, States with higher per capita incomes are able to devote more funds to improving institutions and thus have better institutions. The second issue is one of unobservable omitted variables, which are driving both judicial and economic outcomes, such as pessimism regarding a particular State's prospects or the "backwardness" of another. For these reasons, it is important, but not easy, to find exogenous sources of variation in the quality of institutions if one wishes to relate it to economic performance.

This paper focuses on the judiciary, a topic of first-order importance in this literature, and on its speed, an objective measure identified as a key problem in India. In this paper, I focus on procedural ambiguity and complexity as two potential reasons for the slowness of Courts in India. I read and classified all conflicting judicial decisions pertaining to the Code of Civil Procedure taken by High Courts between 1971 and 1996. Conflicting judicial decisions, in other words violations of precedents already established by High Courts, are found to increase trial duration as judges are required to spend considerable time in choosing between several conflicting views. I also read and classified the 430 State amendments to the Code of Civil Procedure enacted by High Courts between 1971 and 1996. In particular, I find that the 94 amendments complexifying procedures that have to be followed by the Courts (subsequently named "Court red tape" amendments), not explicitly designed to deteriorate speed, significantly increase expected duration of trials in High Courts. I then exploit the spatial and

temporal variation of conflicting judicial decisions and "Court red tape" amendments to instrument the impact of expected duration of a trial in High Court on economic activity.

There are four reasons to believe that these two variables (conflicting judicial decisions and "Court red tape" amendments) could represent good instrumental variables. First, I use a panel data analysis and include State fixed effects to account for permanent differences across States in policies and outcomes. If systematic determinants of amendments are time invariant characteristics, this will remove endogeneity concerns. Second, the temporal variation in conflicting judicial decisions is exogenous as they arise after the arbitrary occurrence of cases pertaining to ambiguous sections of the Code of Civil Procedure. Third, "Court red tape" amendments were not explicitly designed to deteriorate the speed of Courts. As such, they were not endogenous to the judicial slowness at the time the amendment was passed. Fourth, I try to account for forces leading to amendments enactment by looking at the political influence of parties in determining High Court amendments and at the political representation of certain groups likely to influence amendments.

The speed of the judiciary has been identified as a key problem in India. Data on cases pending in courts indicate that there were 3.1 million cases pending in 21 High Courts and 20 million in subordinate courts in 2000[1]. Extreme examples of judicial slowness refer to cases taking 47 years to be resolved, by which time the plaintiff had died. Slow judiciaries could heavily shape economic activity. First, slow judicial enforcement increases the opportunistic behavior of borrowers: anticipating that creditors will not be able to recover their loans quickly via courts, borrowers will be more tempted to default. Creditors respond to this strategic behavior of borrowers by reducing the availability of credit. Second, the probability of harsh punishment in monetary or non-monetary terms

heavily dissuades opportunistic agents to default ex-post on previous agreements. Slower judiciaries make the discounted value of punishment lower, thereby weakening incentives to cooperate. For example, if a firm wants to undertake an investment in order to supply another with a particular asset, the possibility of post-contractual opportunistic behavior by the partner arises once the investment costs are sunk. A speedy judicial system enforcing contracts swiftly could limit post-contractual opportunistic behavior and foster investment. For these reasons, it is important to find an explanation for the slowness of the courts in India and analyze its impact on economic activity. In this paper, I find that slower judiciaries reduce access to credit markets in the agricultural sector, leading to depressed agricultural outputs. I also find that slower judiciaries are associated with lower outputs in sectors dependent on strong judiciaries, such as registered (as opposed to unregistered) manufacturing and trade.

This paper contributes to the empirical literature on the causal effects of institutions on economic performance. There are some successful attempts at resolving the endogeneity and causality issues (Mauro, 1995; Hall and Jones, 1999; Acemoglu et al, 2001). To open the black box of "institutions", I focus in this paper on the judiciary, in particular its speed, which has been identified in India as one of its key problem. The literature often exploits spatial variation in the quality of the judiciary to identify its effect on economic activity. Knack and Keefer (1995) relate professional country risk measures provided by business experts to their measure of judicial quality which is the amount of contract-intensive money (the difference between M2 and cash). However, it might be, for example, that states that have in general better policies are also more inclined to have efficient judiciaries. But if that is the case, judicial quality just reflects the general better economic policies and in itself may not be important in driving better economic outcomes. Jappelli et al (2005) present a model of the effect of judicial enforcement on

credit markets and then test it using panel data from Italian provinces. The authors find, among other things, that the duration of civil trials (measured by actual duration in the past) as well as the stock of pending civil trials per inhabitant are negatively correlated with loans granted to domestic companies and positively correlated with measures of credit constraints. Cristini et al (2001) relate differences in judicial efficiency across Argentinean provinces to the size of provincial credit markets. Castelar Pinheiro et al (2001) perform a similar analysis in Brazil. In these four papers, no attempt is made to deal with the potential endogeneity of the judicial inefficiency measures.

Djankov et al (2003) have made an important contribution to the study of courts. They measured judicial formalism in 109 countries around the world. They found judicial formalism greater in countries with civil rather than common law systems and that it is associated with a lack of consistency, honesty and fairness in judicial decisions. Endogeneity concerns were addressed by using legal origin as an instrument for judicial formalism. Acemoglu et al (2005) use the same data to relate judicial efficiency to economic outcomes using legal origin as an instrumental variable. They find that contracting institutions have no impact on economic performance once property rights institutions are controlled for. This paper differs from Acemoglu et al (2005) in two ways. First, it uses a within-country analysis of India. By limiting myself to one country, I am able to control for a range of factors and influences that cannot be as convincingly controlled for in cross country data. This allows me to identify the effect of judicial efficiency independently from that of laws, legal origins, and other country-wide characteristics. Second, it generates clear policy implications regarding the desirability of simplifying reforms to the Code of Civil Procedure.

One notable exception in this literature is Visaria (2006) where a difference-in-differences strategy based on two sources of variation (the monetary threshold for claims

to be eligible for these tribunals and the staggered introduction of tribunals across Indian states) is used to show that the establishment of tribunals reduces delinquency in loan repayment by between 3 and 11 percent. This paper differs from Visaria (2006) in two ways. First, I focus on judiciary's speed by showing explicitly the link between conflicting judicial decisions and "Court red tape" amendments and decreased judicial speed. Second, I relate judiciary's speed to credit access but also to other outcomes such as agricultural credit supply and development, registered and unregistered manufacturing, trade, hotel and restaurants, banking and insurance, real estate sectors development and ultimately, poverty.

The paper is structured as follows. Section II describes data collected concerning conflicting decisions made by High Courts and amendments to the Code of Civil Procedure between 1971 and 1996. Section III focuses on theoretical issues, explaining both the reasons behind these amendments and the potential impact of the judiciary on economic activity. This section clarifies the econometric specification used by specifying what control variables and what economic outcomes should be used. Section IV contains an empirical analysis of the effects of both conflicting decisions and amendments on the expected duration of High Court trials. Section V examines the effects of the judiciary on economic outcomes. Section VI concludes.

II   Data

Judicial institutions are the same across courts and States. The Indian judiciary operates on three levels: a single Supreme Court at the federal level; High Courts in each of the States; and, at lower levels, district judges for civil cases and session judges for criminal cases. Speed has been identified as a key problem. Examples of judicial slowness are striking:

"the highest court in the country, the Supreme Court, took 11 years to acquit the headmaster of a school on the charge of taking a bribe for signing the salary arrears bill of his school. In another case of judicial delay, the victim was former Union Law Minister, Dr. B.R.Ambedkar. The judgement came in his lifetime but it took 47 years for the Maharashtra government to execute the decree passed in his favour against illegal encroachment of his land by Pakistani refugees. By then he was dead."[2]

Legal experts argue that the Code of Civil Procedure is a major reason why India's judiciary is so slow (Debroy, 2000). To prove this, I will analyze when and which High Courts violated their own precedents using the 144th Report on "Conflicting Judicial Decisions Pertaining to the Code of Civil Procedure, 1908". These conflicting judicial decisions may increase expected durations of High Court trials. I will also analyze how State amendments to the Code affect the expected duration of High Court trials.

II.1 Conflicting judicial decisions

The Code of Civil Procedure (1908) contains India's laws relating to procedures in suits and civil proceedings. They may be summed up as follows: procedures for filing civil cases, court powers for passing various orders, court fees and stamps involved in the filing of cases, rights of the parties to cases, namely plaintiff and defendant, jurisdictions and parameters within which civil courts must function, specific rules for case proceedings, right of appeals, reviews and references. Legal experts have long argued that ambiguity in Indian law increases delays in case treatment. For example, the Indian Law Commission's 136th report entitled "Conflicts in High Courts decisions on central laws—how to foreclose and how to resolve" states that "those who are entrusted with the

function of adjudicating on questions of law must spend considerable time in choosing between two or more possible views on a subject which falls to be considered before them"[3]. This is also true for the Code of Civil Procedure. This code is so ambiguous that opposite decisions on similar cases have been reached in different High Courts. An even worse problem is when the same High Court arrives at opposite verdicts on similar cases at different times. The underlying intuition is that, after a violation of its own precedent by a High Court, judges have no choice but to spend considerable time on choosing between two or more possible views on the subject at hand. Studying every such violation in the period from 1971 to 1996 has allowed me to relate, in the empirical section, their occurrence in certain States at certain times to the expected duration of High Court trials in view of seeing whether or not conflicting judicial decisions caused by the Civil Procedure Code's ambiguity may explain the country's slow judiciary.

The occurrence of conflicting judicial decisions could have another effect on the judiciary. As the Law Commission of India's 136th report states, "those whose business is to advise persons who consult them on questions of law, find it difficult to give such advice with confidence where the decisions are conflicting"[4]. In other words, such High Court reversals may lead to increased uncertainty in case outcome. This might decrease litigants' willingness to file cases and thereby increase judicial speed. The net impact of conflicting judicial decisions on the expected duration of a High Court trial is therefore an empirical question. The empirical section of this paper will relate the occurrence of the same High Court precedent violations to the expected duration of High Court trials. I will now describe the data collected.

The Law Commission of India published in 1992 its 144th report on "Conflicting Judicial Decisions Pertaining to the Code of Civil Procedure, 1908" by K.N. Singh, India's Chief Justice from 25.11.1991 to 12.12.1991. This report summarises conflicting

decisions made by High Courts arising from ambiguity and lack of clarity in the Civil Procedure Code. It presents a total of 30 different Code rules having led to opposite decisions by different High Courts, succinctly describing the Code's ambiguity and listing each High Court's opposing view. It includes 163 opposing decisions by different High Courts involving these 30 rules (see Figure III for a graph of all the decisions taken by High Court violating (+1) or confirming (-1) prior judgements). In the following example I will consider an extreme case in which a High Court contradicted itself in two different cases based on the same point of law.

Order 23, Rule 1(3) allows for the withdrawal of suits with liberty to file fresh suits under certain circumstances, namely "formal defect" or "sufficient grounds". The question here is whether or not the rule applies in cases of partial or total suit abatement, that is, on the death of a party. Ambiguity is caused by another rule which explicitly mentions the death of a party. Order 22—Death, Marriage and Insolvency of Parties— Rule 4 states that in the case of the death of a sole defendant, or in the case of the death of one of several defendants and the right to sue does not survive against the surviving defendant, then the Court, on an application made on behalf of the dead party, shall cause the legal representative of the deceased defendant to be made a party and shall proceed with the suit. However, if no application is made, the suit shall abate as against the deceased defendant. Rule 9 further states that where a suit abates under this order, no fresh suit shall be brought on the same cause of action. Therefore, allowing the plaintiff to withdraw in such circumstances and file a fresh suit would allow him to bypass Order 22. This was the view taken in a 1936 Calcutta Case[5]. In the latter, a suit was directed against the sole dependant for possession. On his death, his legal representatives were not substituted and, consequently, the suit abated. Withdrawal was not permitted. However, in a later 1953 Calcutta Case[6], a leave to withdraw was granted

in a case where the suit abated upon the death of one co-trespasser. Nevertheless, the view taken in 1936 reappeared later in a 1984 case[7]. It is worth noting that K.N. Singh (ex-Chief Justice of India and author of the report) recommended clarifying the code in such a way that the death of a party would not constitute grounds for withdrawal. This recommendation was never introduced and the ambiguity remains to this day.

I argue that High Court reversals such as these increase the likelihood of longer case durations. In fact, in cases where the defendant dies, judges are required to carefully consider not only Order 23, Rule 1(3), Order 22—Death, Marriage and Insolvency of Parties—Rule 4 and Rule 9, but also the following precedents: the 1936 Calcutta Case: Ramesh v Deo Mehar Bibi, 40 CWN 1019 (RC Mitter J.); the 1953 Calcutta Case: Hakir Mahamed v Abdul Majid, AIR 1953 Cal 588, para 3; and the 1984 Calcutta Case: Shyam Ray v Harnam De, AIR 1984 Cal 67, 70 para 12. Because Singh's recommendation was not adopted, coming to a decision is all the more difficult. In this case, I increment by 1, from 1984 on in West Bengal, a "violation of a precedent established by the same High Court" variable. I also subtract it by 1 when a decision taken in a case is confirmed explicitly by another later case. There have been 31 such occurrences in India's States between 1971 and 1996 (see Figure IV for the graph of this variable per state per year). I expect to see a positive correlation with the expected duration of High Court trials.

The crucial feature of the analysis is the temporally random occurrence of this ambiguous case. In this particular example, the "violation of a precedent established by the same High Court" variable takes the value 1 in 1984 in West Bengal due to the occurrence of a death of one party in a case in 1984 and the subsequent necessity to use Orders 22 and 23 of the Code of Civil Procedure. The temporal variation in the "violation of a precedent established by the same High Court" variable is not endogenous to the economic, political or judiciary's conditions, but is rather due to the arbitrary

occurrence of cases pertaining to ambiguous sections of the Code of Civil Procedure.

Spatial variation in this variable is not necessarily random. The fact that judges contradict precedents previously established by their own High Court is perhaps merely a reflection of their ability. The "violation of a precedent established by the same High Court" could simply be a measure of a High Court's quality. An empirical analysis relating this variable to the expected duration of a trial in High Court could possibly confuse the Code of Civil Procedure's ambiguity with the quality of a particular court. I therefore control for the quality or level of competence of a particular court in the empirical analysis.

To measure procedural ambiguity, I have codified the 163 conflicting judicial decisions according to the 144th report on "Conflicting Judicial Decisions Pertaining to the Code of Civil Procedure, 1908" published in 1992 by the Law Commission of India. I will now focus on another potential reason why courts are slow in India: procedural complexity.

II.2   Amendments to the Code of Civil Procedure

The Code of Civil Procedure (1908) is common across Indian Courts and States. It is thus impossible to evaluate the impact of its complexity on judicial speed. A temporal variation in the complexity of the Code of Civil Procedure could be used to look at the evolution of judicial speed before and after the reform. However, several changes could happen in the mean time and drive the observed evolution of judicial speed. A spatial variation in the complexity of the Code of Civil Procedure could be used to look at the evolution of judicial speed in States where High Courts enacted changes. However, High Courts which enact changes could maybe be situated in States more prone to reform. It might be, for example, that states that have in general better policies are also more

inclined to have efficient judiciaries.

Ideally, one should use spatial and temporal variations in the complexity of the Code of Civil Procedure. This would allow for a difference-in-differences analysis: States that enacted changes to the Code of Civil Procedure would be compared to States that did not, before and after these changes. The advantage of a difference-in-differences approach is that it deals with any preexisting systematic difference between States. A difference-in-differences approach would isolate the causal impact of these spatial and temporal variations in the complexity of the Code of Civil Procedure on judicial speed conditional on the common time effects assumption: States that enacted changes, had they not enacted these changes, would have evolved in the same way as States that did not enact changes.

In this paper, I find such spatial and temporal variations in the complexity of the Code of Civil Procedure. This Code has been amended from time to time by various Acts of Central and State Legislatures. According to Section 122[8], High Courts have power to amend, by rules, procedures laid down by the Orders. These High Court amendments set precedents for the entire State since India functions according to the common law system—the actions of High Court judges set precedents for the functioning of subordinate courts in their particular State. The exercise of these powers has brought 430 amendments to the Orders by various High Courts since 1971. I read each of these amendments and isolated the "Court red tape" amendments which add procedures to be followed by the Court. An example of such amendments concerns Order 39—Temporary Injunctions and Interlocutory Orders, Rule 4:

> "**Order for injunction may be discharged, varied or set aside**.-
> Any order for an injunction may be discharged, or varied, or set aside, by

the Court, on application made thereto by any party dissatisfied with such order [...]."

Compare this with the Madhya Pradesh High Court amendment enacted in 1984:

"**Order for injunction may be discharged, varied or set aside**.- Any order for an injunction may be discharged, or varied, or set aside, by the Court *for reasons to be recorded, either on its own motion* or on application made thereto by any party dissatisfied with such order [...]."

Reasons for putting aside an injunction must be recorded in Madhya Pradesh after 1984. This may slow down the courts. I therefore classify this amendment as a +1 in the "Court red tape" variable from 1984 onward for Madhya Pradesh and expect a positive correlation with the expected duration of High Court trials. There have been 94 such amendments in India between 1971 and 1996 (see Figure I for a graph of these "Court red tape" amendments by State and year). Such an amendment was designed to increase the quality of the courts by forcing the judge to record a valid reason in a written form.

In this paper, I focus solely on "Court red tape" amendments. These amendments, as per the example given, were not designed explicitly to decrease the speed of the judiciary. This is an important element to keep in mind for the econometric analysis. Other amendments, called "explicit speed" amendments, were explicitly designed to affect judicial speed. These amendments are by definition endogenous to the economic, political but most of all judicial conditions of the time. The overall assessment of amendments to the Code of Civil Procedure is that there are two types of amendments: supply-side and demand-side amendments. Table I defines each amendment category and presents a number of descriptive statistics (Column (2) presents the sum of the amendments

weighted by their direction, Column (3) presents the ratio of the weighted sum by the total number of amendments: "explicit speed" amendments in India generally favour the shortening of procedures). If one visualizes demand and supply curves for dispute resolution, supply-side amendments involve a shift of the supply curve. Because of the shift, the number of cases disposed will go up or down. There are two types of supply-side amendments found in the Code of Civil Procedure: "Court red tape" and "explicit speed" amendments. Demand-side amendments, which involve shifting the demand curve, may also affect judicial speed. Some amendments are likely to affect litigants' willingness to go to court. This in turn affects case backlog and thus overall judicial speed. I classify these demand-side amendments in nine different categories according to sections of the population they are likely to affect. I call them: "Defendant red tape", "poor", "agricultural", "business", "government", "judgment-debtor", "demand-side solution", "plaintiff red tape" and "certainty". Table I provides a definition for each amendment as well as some descriptive statistics. Data Appendix 1 provides examples of such amendments. Based on these categories, I further define broad indexes: "Speed" amendments include all amendments likely to have an impact on speed, namely these nine demand-side categories and the two supply-side categories. This allows me to define a final category: "implicit speed" amendments equal to the difference between "speed" and "explicit speed" amendments. There have been 288 amendments of this type in India between 1971 and 1996 (see Figure II for a graph of these "implicit speed" amendments by State and year). Data Appendix 2 describes Allahabad State's complete amendment history, providing an overall view of the codification.[9]

This section has isolated two potential determinants of judicial speed: conflicting judicial decisions and Code of Civil Procedure amendments likely to affect expected durations of trials ("Court red tape" amendments). I will now discuss possible endo-

geneity concerns arising from these two determinants as well as the expected impact of the judiciary on economic activity.

III   Theory

This paper attempts to find the causes of judicial inefficiency in India. I have identified 31 conflicting judicial decisions and 94 "Court red tape" amendments between 1971 and 1996 which could affect the expected duration of a trial in High Court.

The paper's second objective is to relate the judiciary's speed to economic performance. Cross section analysis relating judicial speed to economic performance is not appropriate in answering such a question since unobserved State heterogeneity might influence the results. I employ a panel data analysis dealing with unobserved time constant State heterogeneity. There might still, however, be unobserved time variant State heterogeneity. One response to this problem would be to find exogenous sources of variation in the quality of the judiciary. This would allow for a causal interpretation of judicial quality on economic outcomes. This paper seeks to locate sources of variation in the speed of the judiciary. Immediately after a "violation of a precedent established by the same High Court" or a "Court red tape" amendment in a particular State, I expect the duration of a High Court trial to increase and thus economic performance to be affected. This is the instrumental variable approach intuition, one in which "Court red tape" amendments and "violation of a precedent established by the same High Court" are instrumental variables for the expected duration of High Court trials in a regression on economic performance.

Two questions remain. First, one instrumental variable approach assumption is that instruments must be exogenous. I will present in this section the reasons to believe why

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such violations or amendments may be good instrumental variables. Second, I need to clarify exactly what economic outcomes are likely to be influenced by the judiciary; just what are the mechanisms through which the judiciary affects economic activity.

III.1 Quality of the instrumental variables

There are four reasons to believe that these variables could represent good instrumental variables.

First, this paper uses spatial and temporal variation in amendments afforded by the Indian federal system to estimate the impact of amendments to the Code of Civil Procedure on the judiciary's outcomes. State fixed effects account for permanent differences across States in policies and outcomes. If systematic determinants of amendments are time invariant characteristics, this will remove endogeneity concerns. A specificity of this paper is that the first-stage of the instrumental variable estimation is much like a difference-in-differences estimator between 1971 and 1996.

Second, as explained in the example given about one conflicting judicial decision, the temporal variation in conflicting judicial decisions is exogenous as they arise after the arbitrary occurrence of cases pertaining to ambiguous sections of the Code of Civil Procedure.

Third, in this paper, I focus solely on "Court red tape" amendments, which were not explicitly designed to deteriorate the speed of Courts. As such, they were not endogenous to the judicial slowness at the time the amendment was passed. Other amendments such as "explicit speed" amendments were enacted with the explicit objective to affect judicial speed. This is obvious in the following example. Consider Order 9—Appearance of Parties and Consequences of Non-Appearance, Rule 5 of the Civil Procedure Code:

> "**Dismissal of suit where plaintiff, after summons returned un-**

served, fails for one month to apply for fresh summons.-Where, after a summons has been issued to the defendant, or to one of several defendants, and returned unserved, the plaintiff fails, for a period of one month from the date of the return made to the Court by the officer certifying to the Court returns made by the serving officers, to apply for the issue of a fresh summons the Court shall make an order that the suit be dismissed as against such defendant, unless [...]"

Compare it with the Bombay High Court amendment enacted in 1987:

"**Dismissal of suit where plaintiff, after summons returned unserved, fails for *two months* to apply for fresh summons.**-Where, after a summons has been issued to the defendant, or to one of several defendants, and returned unserved, the plaintiff fails, for a period of *two months* from the date of the return made to the Court by the officer certifying to the Court returns made by the serving officers, to apply for the issue of a fresh summons the Court shall make an order that the suit be dismissed as against such defendant, unless [...]"

I have italicized the difference between the two amendments. This difference could potentially affect case backlog. It implies that, in India, a case is dismissed after one month if the plaintiff fails to apply for a fresh summons once a defendant summons returns unserved. However, in the Bombay High Court, and consequently in all Maharashtra courts, cases are dismissed after only two months. This may have slowed down case dismissal in Maharashtra State after 1987. I therefore classify this amendment as a -1 in the "explicit speed" variable forever after 1987 for Maharashtra[1011]. I do not consider "explicit speed" amendments in the analysis as these amendments are obviously

endogenous. I only consider "Court red tape" amendments, which only include amendments adding procedures to the courts and do not explicitly posit delay reduction as an objective.

However, even if "explicit speed" amendments are discounted, one could still argue that high court "Court red tape" amendment making is a purposeful action, one responsive to economic, political or even judicial conditions within the State.

Fourth, as Besley et al [2000] advocate in this case, I try to identify and account for the forces leading to these amendments. One endogeneity concern is related to political influence. It may be that political parties that pursue less market-friendly economic policy changes are also more likely to allow court red tape to increase. Additionally, they may have influence on the High Courts in their State and hence affect the "Court red tape" amendments. Under Section 122 of the Code of Civil Procedure, High Courts have the power to amend, by rules, procedures laid down in the Orders. No political interference in decision making is expected in theory; however, considering the tumultuous relations between India's Executive and Judiciary, this assumption seems unreasonable. Political parties and sensitivities in each State influence the making of amendments. It is particularly instructive to examine the history of conflicts between Executive and Judiciary between 1971 and 1996, and in particular the history of judge appointment, in order to determine the degree of independence enjoyed by decision-making courts. To do this, I will borrow from Bhagwan D. Dua's survey in "A Study in Executive-Judicial Conflict: The Indian Case".

In the 1970s, India's judiciary was free from any political interference. In June 1975, Allahabad's High Court found the Prime Minister guilty of electoral fraud and ordered her removed from Parliament and banned from running for an additional six years. Instead of confronting the charges, Mrs. Gandhi declared a State of Emergency and

launched a massive crackdown on civil liberties and political opposition. Judges then began to interpret the Constitution in light of the new political climate.

The Janata Interregnum (1977-79) attempted to restore to judges some degree of self-confidence. The government cancelled Mrs. Gandhi's mass transfer of High Court judges in order to emphasize that the Constitution was not in the business of punitive transfers (i.e. transfers without consultation of India's Chief Justice) of judges.

However, the return to power of the Congress (I) Party in 1980 revived memories of the Emergency regime. Mrs. Gandhi has often viewed the courts as centres of political opposition and in 1981 bluntly called into question the judicial integrity of the Janata-appointed judges[12]. Chief Justice Chandrachud complained that:

> "Since the Executive is controlled by political leaders...it may, it is feared,
> transfer a judge to a far-off place like Sikkim, the Andaman Islands or Assam,
> or refuse to grant him further extension if he does not toe the line"[13].

Due to internal dissension, the Supreme Court undermined in the same year its independence in the Judges' Transfer Case, in which the majority of a seven-judge Constitutional Bench offered the government carte blanche to hire Supreme Court judges, fire temporary judges and transfer (except on a mass scale) High Court judges without the consent of India's Chief Justice. In other words, Mrs. Gandhi was given a free hand to manage the judiciary as she liked.

In 1993, the policy of transferring judges without consent was abandoned following the Second Judges' case. The Supreme Court introduced the concept of the primacy of the Chief Justice of India in matters of recommending persons for appointment to the higher judiciary[14].

To conclude this short survey, I expect political parties to influence the passing

of various amendments. However, political interference was limited to certain periods and parties. I measure a State's political inclination by the proportion of seats won in Legislative Assemblies by four different party groupings: the Congress Party (Indian National Congress, Indian Congress Socialist, Indian National Congress Urs), a hard left grouping (Communist Party of India, Communist Party of India Marxist), a soft left grouping (Socialist Party, Praja Socialist Party), and Hindu parties (Bhartiya Janata Party, Bhartiya Jana Sangh). I include these terms in the regressions and also interact these variables with an all-India dummy at value 1 in cases where political interference is expected, such as during the Emergency Regime (1975-77) and during the years 1981-93 when the First Judges' case was prevalent (described in Figure V). I include the political variables interacted with this dummy as control variables in all the regressions in order to remove bias resulting from omission of these variables.

Another endogeneity concern is that certain groups not divided along party lines but sharing common interests might succeed in influencing the judiciary. An intuitive hypothesis would posit the influence of scheduled castes and tribes in the Legislative Assemblies on the judiciary which favoured their particular groupings. The suggestion that such castes and tribes would strive to improve access to justice for poorer sections of the society would appear intuitive. I therefore expect "Scheduled Castes and Scheduled Tribes in Legislative Assemblies" to exert pressure on courts in regards to demand-side amendments favouring judicial access. There is growing evidence suggesting that seat reservation affects public goods allocation in a way that favours the group benefiting from the reservation. Pande [2003] found that reservations of seats for Scheduled Castes and Scheduled Tribes in State Legislative Assemblies led to increased transfers towards these groups. After accounting for the direct impact of the fraction of the population that comprises a State's Scheduled Castes and Scheduled Tribes, a 1% rise in the frac-

tion of seats reserved to Scheduled Castes in State Legislature is associated with a 0.6% increase in job quotas for Scheduled Castes. A 1% rise in the fraction of seats reserved for Scheduled Tribes in State Legislatures is associated with an increase of 0.8 percentage points in the share of total State spending devoted to welfare programs targeted to Scheduled Tribes. At the Panchayat level, Besley et al. [2004] found that reservation of leadership positions for a Scheduled Caste or Scheduled Tribe increases—by about 7 percentage points—the likelihood that a Scheduled Castes or Scheduled Tribes village household has access to toilets, electricity connections or private water connections via government schemes. I have thus included the proportion of seats reserved for Scheduled Castes and Scheduled Tribes as well as the group's population share according to government census following Pande [2003].

This section shows that the use of panel data, the temporally exogenous conflicting judicial decisions and the "Court red tape" amendments not explicitly designed to increase judicial speed are good theoretical reasons to believe that conflicting judicial decisions and "Court red tape" amendments might be good instrumental variables. Additionally, the composition of executive power and Scheduled Castes/ Scheduled Tribes representation must be accounted for in all regressions because the judiciary is not free, during certain periods, from political interference affecting the enactment of amendments. The second question of how the Judiciary affects economic activity remains.

III.2   A model for the Judiciary

There is increasing evidence suggesting that court system efficiency is important to well-functioning economies. Slow judiciaries increase costs of accessing legal systems and favour those with more extra-legal bargaining power. There are two key areas

where courts may play a role in India: credit markets (difficulties in repaying loans) and contract enforcement. I expect legal system inefficiency to contribute to poor conditions for society's most vulnerable as well as for its most intensive users of the judiciary. For example, I expect the poor (society's most vulnerable), creditors (as opposed to debtors), registered sectors (as opposed to unregistered sectors using extra legal dispute resolution mechanisms) and contract-intensive activities (such as trade) to be adversely affected by inefficient legal systems. I will now describe the mechanisms through which the judiciary affects credit markets and firms' contracting behavior.

Judicial systems influence firms' debt contracts. As Pagano et al [2002] explain:

> "The key function of courts in credit relationships is to force solvent borrowers to repay when they fail to do so spontaneously. By the same token, poor judicial enforcement increases the opportunistic behavior of borrowers: anticipating that creditors will not be able to recover their loans easily and cheaply via courts, borrowers will be more tempted to default. Creditors respond to this strategic behavior of borrowers by reducing the availability of credit."

The authors develop a model in which collateral is used as a device to solve credit rationing. They find that improved judicial efficiency reduces credit rationing and expands lending. One should expect inefficient judiciaries to disproportionately affect sections of society unable to provide collateral. I will test this theoretical implication by examining the situation of farmers, who typically comprise the poor in India.

The second intuitive consequence of an imperfect judiciary is the modification of economic agents' willingness to cooperate in previously signed contracts. We know that judiciaries act as important deterrents to fraud that might be more economically attrac-

tive in the short run. The probability of harsh punishment in monetary or non-monetary terms would heavily dissuade opportunistic agents to default ex-post on previous agreements. In particular, I expect trade to be negatively affected by weak judiciaries. Johnson et al [1999] state that firms work to sustain relationships in order to avoid searching for new trading partners. To do so, they offer trade credit. But to offer trade credit is to trust that it will be repaid.

One could also expect the quality of judiciaries to impact on investments undertaken by the firm. I consider the case where a firm would undertake an investment in order to supply another with a particular asset. However, as Klein et al (1978) emphasized, the possibility of post-contractual opportunistic behavior arises. Indeed, to induce the supplier to undertake an investment, a firm can either write a long-term contract with favorable terms for the supplier or guarantee exclusivity rights. But once the costs of the investment are sunk, there is an immediate incentive for the firm to renege on the contract and capture the suppliers' rents. Alternatively, if search costs to find a new supplier are high, there is an immediate incentive for the supplier to use its monopoly power to impose higher prices. These frictions could reduce the incentive to invest; Klein et al (1978) conclude that vertical integration will supersede market systems in such cases. But another way to limit post-contractual opportunistic behavior is a speedy judicial system that enforces contracts swiftly. This shows that judiciaries should affect the economic performance of contract-intensive activities. I will test this implication by examining the performance of manufacturing. If agriculture, trade and manufacturing are negatively affected by weak judiciaries, I also expect poverty to increase. I will test these theoretical implications and present the econometric method used.

IV   Methods and Results

This section will relate both conflicting decisions and amendments to the Code of Civil Procedure to judicial functioning. I expect the "violation of a precedent established by the same High Court" (a High Court decision violating an earlier decision by the same High Court because of ambiguity in the Code of Civil Procedure) to have an effect on the expected duration of a trial in High Court. I also expect "Court red tape" amendments (which modify procedures to be followed by the courts) to be related to the expected duration of a trial in High Court. It is noteworthy that this section is in fact the first stage of an Instrumental Variable estimation of the impact of the judiciary on economic activity. In the next section I will relate judicial functioning to economic activity using these conflicting decisions and amendments as Instrumental Variables.

In this section, the outcome of interest is the expected duration of a trial in High Court ($duration_{it}$). It is equal to the number of pending cases plus the number of filed cases within the year divided by the number of cases disposed of within the year. This duration is measured in years. Figure VI shows the graph of this variable in 25 states between 1971 and 1996. To relate "violation of a precedent established by the same High Court" ($violation_{it}$) and amendments of the Code of Civil Procedure ($amendments_{it}$) and to the expected duration of a trial in High Court, I perform regressions of the form:

$$(1) \qquad duration_{it} = \alpha_i + \beta_t + \gamma violation_{it} + \delta amendments_{it} + \theta x_{it} + u_{it}$$

where i corresponds to a state, t to time. α_i are state fixed effects, β_t time fixed effects. x_{it} are control variables. These x_{it} will include incrementally the ratio of dismissed appeals to total appeals from the respective high court. This variable determines the probability that a High Court decides correctly. The underlying assumption here is that

the Supreme Court is not biased and it is not subject to errors, and that the majority of the cases are appealed. This is therefore a measure of the quality of courts and an important variable to take into account in order to isolate the impact of ambiguity in the Code of Civil Procedure with $violation_{it}$ and not only the impact of court quality. I also include political political controls: the proportion of seats won by Congress parties, hard left parties, soft left parties and Bharatiya Janta parties interacted with a dummy indicating when Legislative Assemblies are likely to influence judicial process[15]. I then include the proportion of seats reserved to Scheduled Castes/Scheduled Tribes in State Legislative Assemblies interacted with a dummy indicating when Legislative Assemblies are likely to influence judicial process and the proportion of Scheduled Castes/Scheduled Tribes in the population according to censuses, according to the reasoning developed in the theoretical section above. I include the number of Panchayats per million capita in the State to account for alternative dispute resolution mechanisms as well as the proportion of total revenue expenditure spent on Organs of State lagged for two years to account for the budget devoted to judicial functioning. u_{it} is a disturbance term. I cluster the standard errors by State in order to deal with concerns over serial correlation [Bertrand et al, 2002]. State fixed effects captures time-constant State-specific factors such as culture and geography. Year effects capture common shocks such as the central amendments to the Code of Civil Procedure that took place in 1976 (and in 1999 and 2002, though the latter two are not included in the observation sample from 1971 to 1996) as well as other centrally implemented policies. The coefficients of interest are γ and δ.

Table II relates conflicting judicial decisions and "Court red tape" amendments to expected durations of High Court trials. In Column (1), the dependent variable is $duration_{it}$. The only explanatory variables are "violation of a precedent established by

the same High Court" and "Court red tape" amendments. State fixed effects and year fixed effects are included. One extra violation of a precedent established by the same High Court will increase the expected duration of a trial in High Court by 18.8 days. This coefficient is statistically significant. It confirms the intuition that judges must spend more time in choosing between conflicting views when the same High Court violates its own precedents. One extra "Court red tape" amendment increases the expected duration of a trial in High Court by 3.3 days. This coefficient is statistically significant. It confirms the intuition that adding or complicating Court procedures increases delays. However, the "violation of a precedent established by the same High Court" variable could very well be correlated with the quality of judges. I therefore include the ratio of dismissed appeals in Column (2). I also add political controls following the theoretical section, which highlighted the fact that "Court red tape" amendments are perhaps responsive to political conditions. I measure a State's political inclination by the proportion of seats won in Legislative Assemblies by four different party groupings: the Congress Party (Indian National Congress, Indian Congress Socialist, Indian National Congress Urs), a hard left grouping (Communist Party of India, Communist Party of India Marxist), a soft left grouping (Socialist Party, Praja Socialist Party), and Bhartiya Janata Party. I further interact these variables with an all-India dummy taking a value 1 when I expect some political interference, such as during the Emergency Regime of 1975-77 and the years 1981-93, when the First Judges' case was taking place (as described in Figure V)[16]. The coefficients are very similar in Column (2). Another hypothesis is that increased representation of Scheduled Castes/Scheduled Tribes in Legislative Assemblies affects judicial quality as Scheduled Castes/Scheduled Tribes push for reforms disproportionately favouring their groups of origin. I included in Column (3) the proportion of seats reserved for Scheduled Castes/Scheduled Tribes in State Legislative Assemblies

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interacted with a dummy indicating when the former are likely to influence the judicial process and the proportion of Scheduled Castes/Scheduled Tribes in the population according censuses following Pande's [2003] methodology. The coefficients are again very similar. In Column (4), I also include the number of Panchayats per million capita in the State to account for alternative dispute resolution mechanisms. In fact, it is often claimed that judicial systems have only limited impact on economies because people resort to alternative dispute resolution institutions, particularly to informal ones. Koehling [2002] describes one such informal Indian institution: the Panchayats. They play a crucial role in settling and avoiding rural disputes. Panchayats, with their limited judicial authority, are used to settle disputes about land usage, tenure and commons. As locally-bound institutions, they are highly efficient since they are familiar with village situations and litigants. As a result, their level of acceptance among the population is high. In cases of dispute resolutions, Panchayats can impose very limited sanctions, but the social pressure created by judgements serves as strong incentives to comply with judgements. I also include in Column (4) the proportion of total revenue expenditure spent on the Organs of State[17] lagged two years in order to account for budgets devoted to judicial functioning. The coefficients remain similar. Other types of amendments could potentially affect the expected duration of a trial in High Court. In Column (5), I include "speed" amendments. The latter is a cumulative variable increased by 1 after any amendment likely to have an impact on the speed of the courts is passed. This variable includes explicit speed, court red tape, defendant red tape, judgement-debtor, demand-side solution, plaintiff red tape, and certainty amendments. There is no effect of this variable on the expected duration of a trial in High Court. In Column (6), I include "implicit speed" amendments. This variable is the difference between speed amendments and explicit speed amendments. I subtract "explicit speed" amendments

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because these amendments are clearly responsive to judicial conditions and are therefore endogenous to the expected duration of a case in trial. I do not argue that "Court red tape" amendments are any less endogenous, but at least they are not explicitly designed to reduce delays. Column (6) shows no significant impact of "implicit speed" amendments. I also included separately or together every different type of amendment and consistently found that only "Court red tape" amendments and "violation of a precedent established by the same High Court" were significant[18]. Column (4) is the preferred specification because it includes only significant amendments affecting duration and the most complete set of controls. It is interesting to note that the F-value of the F-test of the joint significance of "Court red tape" amendments and "violation of a precedent established by the same High Court" is 8.06 significant at 5 percent. This means that "Court red tape" amendments and "violation of a precedent established by the same High Court" affect significantly the expected duration of a trial in High Court.

To conclude this section, I found in the panel data analysis that "violation of a precedent established by the same High Court" and "Court red tape" amendments were significant determinants of the expected duration of High Court trials. This confirms the intuition presented in the theoretical section. Having found two sources of variation in judicial speed, I am now able to relate it to economic performance, particularly to the functioning of credit markets, registered manufacturing and trade sector performance.

V The impact of the judiciary on economic outcomes

This section relates the expected duration of High Court trials to economic activity.

I use the following regressions:

$$(2) \qquad e_{it} = \epsilon_i + \eta_t + \lambda duration_{it} + \rho x_{it} + \mu_{it}$$

where i corresponds to a State and t to time. e_{it} is an economic outcome of interest. I will first test Proposition 1, applied to the agricultural sector where issues of credit availability are more stringent, by using measures of agricultural credit supply and development. I will then test Proposition 2 by using measures of the development of registered manufacturing, unregistered manufacturing, trade, hotel and restaurants, banking and insurance, real estate sectors development and ultimately, poverty. ϵ_i are State fixed effects and η_t are time fixed effects. x_{it} are control variables. I use the exact same control variables used in Table II. μ_{it} is a disturbance term. Standard errors are clustered by State to take into account concerns over serial correlation [Bertrand et al, 2002]. State fixed effects capture State-specific factors such as culture and geography. Year effects capture common shocks such as central amendments to the Code of Civil Procedure as well as other centrally implemented policies. The coefficient of interest is λ.

There can clearly be some endogeneity between the efficiency of a particular institution and the economic performance of a particular State. The first issue is one of reverse causality: States with higher per capita incomes are able to devote more funds to improving institutions and thus have better institutions. The second issue is one of unobservable omitted variables, which are behind both judicial and economic outcomes, such as pessimism regarding a particular State's prospects or the "backwardness" of another. This is why two instrumental variables are employed for the expected duration of High Court trials: "violation of a precedent established by the same High Court" and

"Court red tape" amendments.

As highlighted in section III.1, there are four reasons to believe these variables could be good instrumental variables (the use of panel data, the temporally exogenous conflicting judicial decisions, the "Court red tape" amendments not explicitly designed to increase judicial speed, the control for forces that could lead to amendment enactment). The previous section also demonstrated that "violation of a precedent established by the same High Court" and "Court red tape" amendments were significantly related to the expected duration of High Court trials. In Table II, Column (4), the F-test of the joint significance of the two instruments is 8.06.

In addition to this evidence, I present statistical tests of the quality of the instruments. I will present over identification as well as Hausman's tests. The over-identification test is a test of joint significance of both instruments in a regression of the fitted residuals from the second-stage on these instruments (and all exogenous variables). This test effectively measures the correlation between instrumental variables and the error term, which should be insignificantly different from zero for appropriate instrumental variables. The Hausman [1978] test is a test of the endogeneity of the judicial measure and of the quality of the instruments. It tests the equality of the coefficients between OLS (efficient and consistent under H0 only) and IV (always consistent). There should be a systematic difference between OLS and IV results in the case of an endogenous measure of judicial speed and appropriateness of the instruments.

Table III examines the relationship between High Court trial duration and credit supply to agricultural sectors. For reasons highlighted in the theoretical section, I expect credit availability to be reduced in regions with slower judiciaries. I expect this problem to be more stringent for borrowers with less collateral, typically farmers. Column (1) shows an OLS regression of real per capita agricultural bank finance on the expected

duration of a High Court trial. The result is insignificant. Column (2) presents a reduced form version of the impact of "violation of a precedent established by the same High Court" and "Court red tape" amendments on real per capita agricultural bank finance. This confirms the fact that these two variables have an impact on real per capita agricultural bank finance. One extra "violation of a precedent established by the same High Court" decreases real per capita agricultural bank finance by 6 percent, while one extra "Court red tape" amendment decreases it by 0.6 percent. This is consistent with the hypothesis that "violation of a precedent established by the same High Court" and "Court red tape" amendments increase the expected duration of High Court trials, which, in turn, discourages creditors from offering credit, since they know it will be harder to recover defaulted loans. It is possible to present some instrumental variable evidence. Column (3) instruments the expected duration of a trial in High Court with "violation of a precedent established by the same High Court" and "Court red tape" amendments. The coefficient of duration is now negative and significantly different from 0. For example, an extra 18.8 days in the expected duration of a trial in High Court[19] decreases real per capita agricultural bank finance by 6 percent. The fact that the instrumented coefficient is now statistically different from 0 as opposed to the OLS case may arise from the presence of unobserved State heterogeneity. Suppose that in a particular State citizens are especially fastidious, displaying meticulous attention to detail. They will thus be more litigious and file more cases since they are excessively sensitive to even the slightest deviation in the terms of a contract. This will increase the expected duration of a trial in High Court. On the other hand, economic performance will increase thanks to the citizenry's careful attention to detail. This unobserved variable, if omitted, will bias upward the coefficient between duration and economic performance. If the instrumental variables are appropriate, then this bias should be removed. This may be why I find

a significantly negative coefficient in Column (3) as opposed to Column (1). The over-identification test in Column (3) shows that the correlation between the instruments and the error term is not significantly different from 0. The instrumental variables pass the over-identification test. This confirms the fact that these two instruments are appropriate. The χ^2 of the Hausman [1978] test is significantly different from 0. This means that there is a systematic difference between OLS and IV. It is appropriate to instrument duration with "violation of a precedent established by the same High Court" and "Court red tape" amendments. This first result is confirmed in Columns (4) and (5). An increase of 18.8 days in the expected duration of a High Court trial decreases the account number of commercial bank advances to agriculture per capita by 3.3 percent and real per capita regional rural bank credit by 6.4 percent. This reduced credit availability impedes agricultural development. An increase of 18.8 days in the expected duration of a trial in High Court decreases by 1.7 percentage points the ratio of irrigated agricultural land. As a result, agricultural performance is impeded by a weak judiciary. An increase of 18.8 days in the expected duration of a trial in High Court decreases per capita State agricultural domestic product by 0.6 percent. The over identification tests are always conclusive.

Table IV examines the relationship between the expected duration of a trial in High Court and the economic performance of various sectors. In each case I instrument the expected duration by "violation of a precedent established by the same High Court" and "Court red tape" amendments. Column (1) shows that an increase of 18.8 days in the expected duration of a trial in High Court decreases a State's per capita manufacturing domestic product by 6 percent. This confirms the fact that this sector should be affected by weak judiciaries, since one of the characteristics of this sector in India is the prevalence of relationship-specific investment, heavily dependent on strong judicia-

ries. Column (2) shows that the registered manufacturing sector is even more affected. Column (3) shows that an increase of 18.8 days in the expected duration of a trial in High Court decreases per capita State trade, hotel and restaurant domestic product by 4 percent. This confirms the intuition that a sector relying heavily on trade credit to sustain relationships must trust that it will be repaid to perform well. As manufacturing and trade are negatively affected by weak judiciaries, I also expect people employed in these sectors to be affected. I use the urban head count index (in percentage) as the dependent variable in Column (4) to measure the impact of the judiciary on poverty. The latter shows that an increase of 18.8 days in the expected duration of a trial in High Court increases the urban head count index by 1.9 percentage points. Overidentification tests are consistently conclusive.

These results seem to indicate that the judiciary plays a considerable role in the economic outcomes of India's States. I found that farmers have less access to credit markets. As a result, agricultural development is impeded. I also found that contract-intensive sectors of the economy, such as manufacturing and trade, are adversely affected by weak judiciaries. The judiciary impacts the weaker sections of the country, such as the poor and farmers.

VI   Conclusion

In this paper, I have found two sources of variation of judicial speed that are used to evaluate its impact on economic activity. First, the ambiguity of the Code of Civil Procedure, measured by the violation of precedents established by the same High Court, affects expected durations of High Court trials. This is because judges must spend time choosing between conflicting views after such events. Second, amendments to the Code of Civil Procedure that add or complicate procedures to be followed by the Court affect

expected durations of High Court trials.

I then relate expected durations of High Court trials to economic outcomes using . I used these two variables, "violation of a precedent established by the same High Court" and "Court red tape" amendments, as instrumental variables for the expected duration of a case in trial. There are four reasons to believe that these two variables could represent good instrumental variables. First, I use a panel data analysis and include State fixed effects to account for permanent differences across States in policies and outcomes. If systematic determinants of amendments are time invariant characteristics, this will remove endogeneity concerns. Second, the temporal variation in conflicting judicial decisions is exogenous as they arise after the arbitrary occurrence of cases pertaining to ambiguous sections of the Code of Civil Procedure. Third, "Court red tape" amendments were not explicitly designed to deteriorate the speed of Courts. As such, they were not endogenous to the judicial slowness at the time the amendment was passed. Fourth, I try to account for forces leading to amendments enactment by looking at the political influence of parties in determining High Court amendments and at the political representation of certain groups likely to influence amendments.

Additionally, I presented statistical tests concerning the validity of these instruments. First, in a first-stage regression, these two instruments are significantly related to trial duration. Second, these two instruments are not related to the error term of the second-stage regression and thus pass the over-identification test of the endogeneity of the instrumental variables. Third, the instrumental variable estimation passes the Hausman Test.

In this paper, I found that the judiciary heavily shapes the economic outcomes of India's States and that farmers have less access to credit markets. As a result, agricultural development is impeded. I also found that contract-intensive sectors of the economy,

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such as registered manufacturing and trade, are adversely affected by weak judiciaries. Judiciaries impact weaker sections of the country, such as the poor and farmers.

The policy implications of this paper are clear. The Code of Civil Procedure's ambiguity must be reduced by simplifying and clarifying confusing and redundant rules. For example, the recommendations of India's Ex-Chief Justice K.N. Singh in the 144th Law Commission Report entitled "Conflicting Judicial Decisions Pertaining to the Code of Civil Procedure, 1908" could be followed. They have yet to be incorporated into the Civil Procedure Code. Clarifying each ambiguous rule will allow judges to save time by liberating them from having to deliberate over so many conflicting views. Alternatively, to reduce expected durations of High Court trials, the number and complexity of procedures to be followed by the Courts must be reduced.

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Notes

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[6]Hakir Mahamed v Abdul Majid, AIR 1953 Cal 588, para 3

[7]Shyam Ray v Harnam De, AIR 1984 Cal 67, 70 para 12.

[8]The Code is divided into two parts, namely Sections and Orders. While the main principles are contained in the former, the detailed procedures with regard to matters dealt with by the Sections are spelled out in the latter.

[9]Only 'implicit' and 'explicit speed', 'court red tape', and 'defendant red tape' are included. 'Speed court' is equal to 'explicit speed' if the court itself is in a position to set time limits. Other types of amendments included in 'speed' and 'implicit speed' are not presented.

[10]It is interesting to note that this one month period was originally a three months period before a pan-India amendment in 1976. It was later changed in 1999 in another pan-India amendment to just 7 days! The 1999 amendment had the explicit objective of facilitating the swift disposal of civil suits and proceedings. The fact that this duration was modified in 1999 seems to indicate that this order is of particular importance in determining judicial speed.

[11]There have been 50 such amendments in India between 1971 and 1996. It is also worth noting that the time limit imposed in this particular example cannot be modified or extended by courts. I noted "explicit speed" amendments where provisions state that a court may extend a time limit if it wishes to do so. This is important because it is often said that any amendment is inefficient if it goes against the habits of the court and if the latter retains the possibility of modifying time limits on a case by case basis. There are 42 explicit speed amendments where discretion regarding time limits is left

to the courts. It is important to keep this in mind when evaluating the impact of these amendments.

[12]*India Today*, January 31, 1982, p.62

[13]*Statesman weekly*, May 2, 1981.

[14]*Frontline*, A flawed mechanism, ZV.Venkatesan, 06/06/2003.

[15]I also tried with the level terms not interacted with the dummy.

[16]I also included level terms, not interacted with the dummy, and the results were again similar.

[17]This measure is not perfect as it encompasses the State budget for Executive and Legislative branches.

[18]results not presented for clarity.

[19]This was the increase implied by an extra "violation of a precedent established by the same High Court"
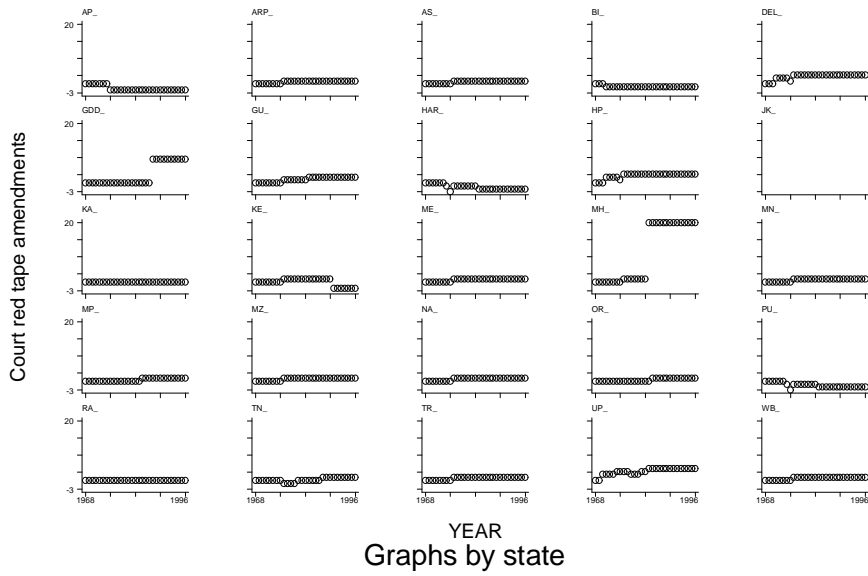
Figure I: Cumulative Index of the "Court Red Tape" Amendments per State Between 1968 and 1996
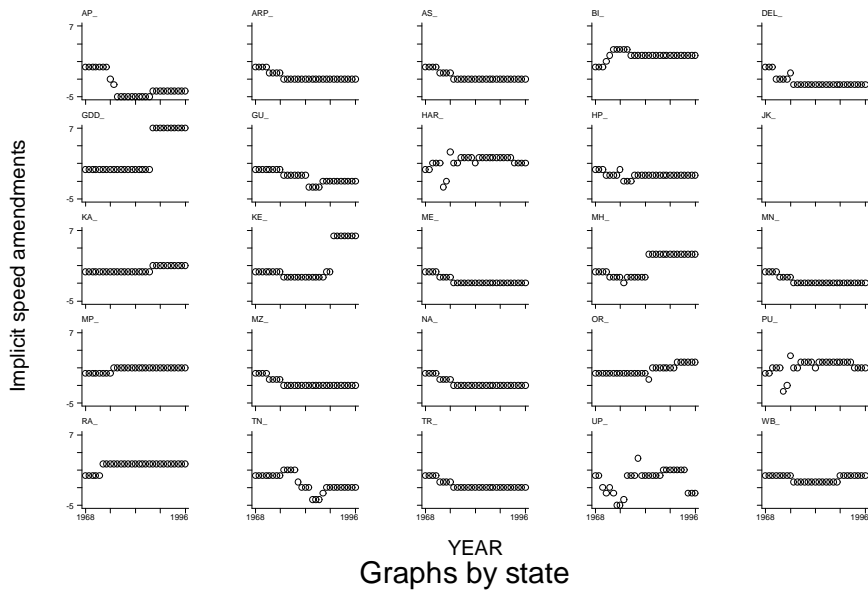
Figure II: Cumulative Index of the "Implicit Speed" Amendments per State Between 1968 and 1996

Figure III: Cumulative Index of the "Violation of a Precedent Established by Another High Court" per State Between 1968 and 1996
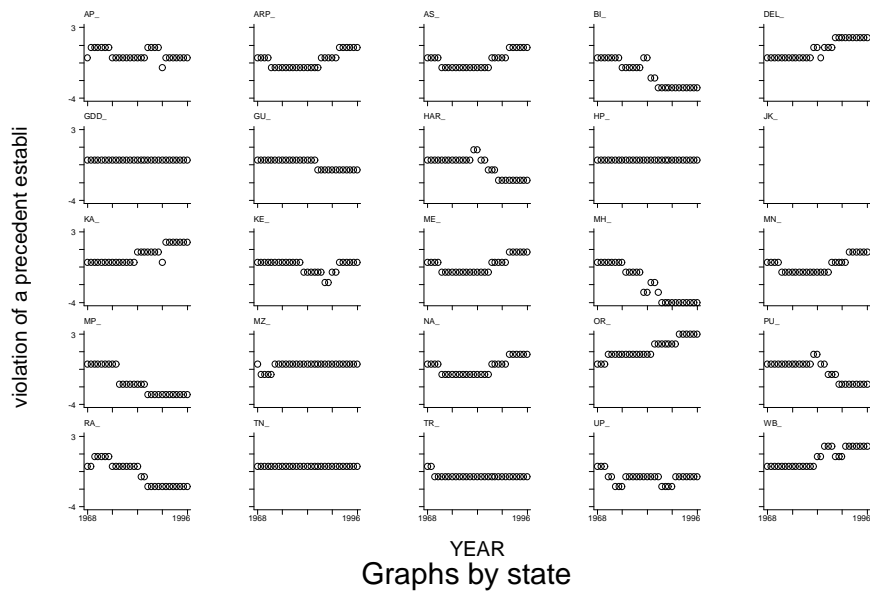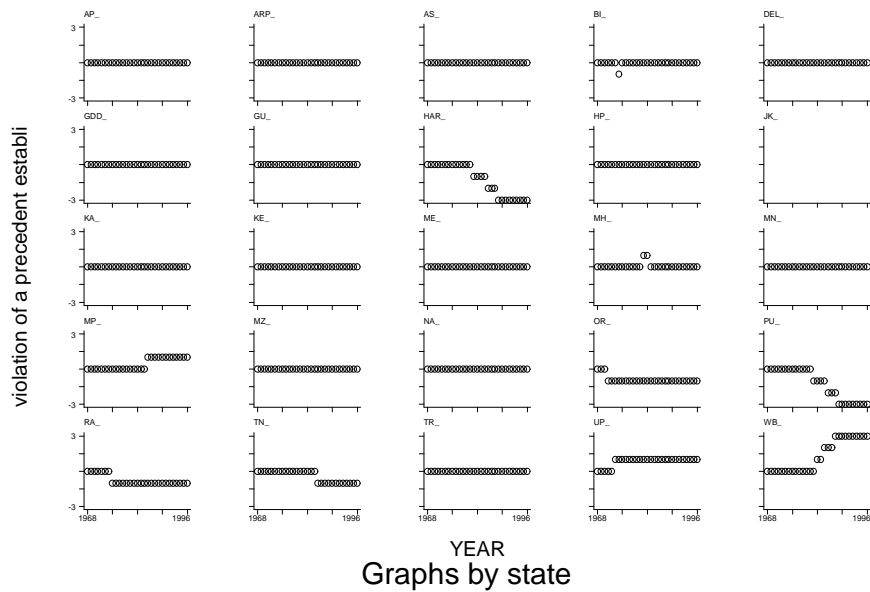

Figure IV: Cumulative Index of the "Violation of a Precedent Established by the Same High Court" per State Between 1968 and 1996
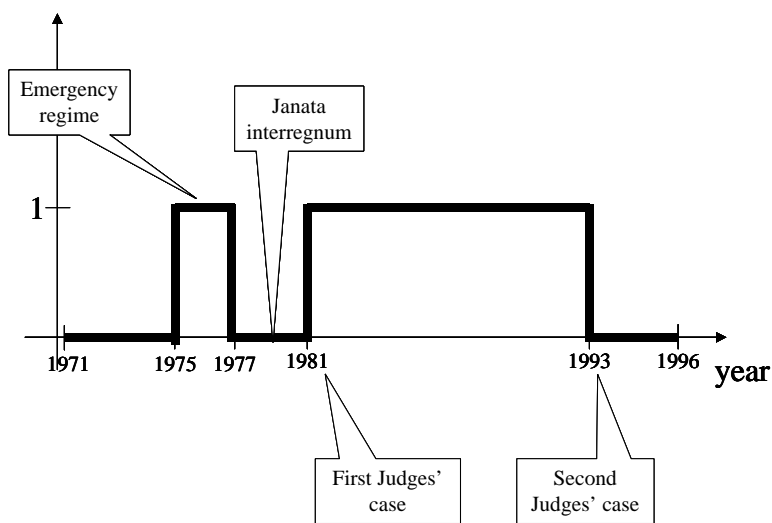
Figure V: Dummy Variable Indicating the Likelihood of Political Interference With the Judiciary in Time
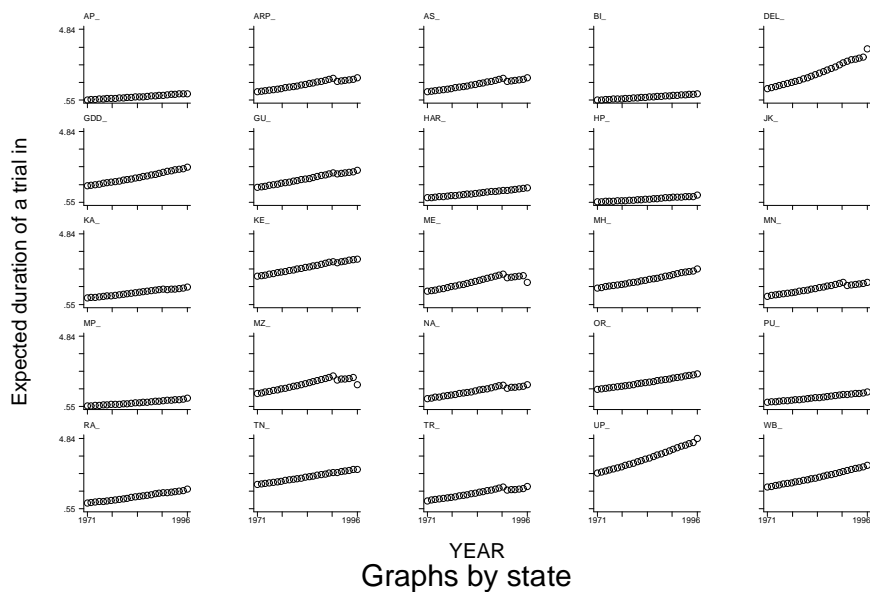
Figure VI: Expected Duration of a Trial in High Court

Table I: Descriptive Statistics of the Amendments

Type of amendment		Definition	(1) No. of amendments	(2) overall weighted by direction of amendment / sum the sum	(3) ratio sum/number amendments / weighted of amendments
	"explicit speed"	is it explicitly written that the amendment is made for expeditious justice?	50	+24	0.48
Supply-Side amendments	mention of court power to extend limits	does that leave the possibility to the court to set the time limits?=reforms defeated by courts	42	+34	0.81
	"Court red tape"	more red tape for the court?	94	+36	0.383
	"defendant red tape"	more red tape for the defendant?	34	+24	0.71
	"poor"	explicitly pro-poor?	50	+17	0.3
	"agricultural"	explicitly pro-agricultural?	22	+18	0.8
	"business"	explicitly mentioned pro-business?	33	-1	-0.03
Demand-side amendments	"government"	explicitly pro-government?	34	+26	0.8
	"judgement-debtor"	explicitly pro-judgement debtor?	149	+31	0.208
	"demand-side solution"	will that decrease demand for justice?=less incentive to file a complaint?	47	+19	0.404
	"plaintiff red tape"	does that constitute more red tape for the plaintiff?	35	+2	0.714
	"certainty"	does that increase certainty of the outcome	32	+10	0.313

Table II: Impact of Conflicting Judicial Decisions and Court Red Tape Amendments on the Expected Duration of a Trial in High Court

	(1)	(2)	(3)	(4)	(5)	(6)
	expected duration of a trial in High Court					
violation of a precedent established by the same High Court	0.051489 (3.09)***	0.049651 (2.68)**	0.052168 (1.98)*	0.019746 (2.12)*	0.020617 (2.13)*	0.020084 (2.14)*
Court red tape amendments	0.009263 (2.04)*	0.010129 (2.03)*	0.012678 (2.41)**	0.008851 (3.09)***	0.006098 (1.98)*	0.009820 (2.13)*
Ratio of dismissed appeals		0.001056 (0.44)	-0.001171 (1.03)	-0.001830 (1.88)*	-0.001520 (1.90)*	-0.001785 (1.87)*
Political controls (interacted)	no	yes	yes	yes	yes	yes
Sc/st seats (interacted)	no	yes	yes	yes	yes	yes
Panchayats				-0.000758 (1.73)	-0.000740 (1.84)*	-0.000753 (1.73)
Exp. Org. Of state (-2)				0.004945 (0.70)	0.004693 (0.70)	0.004938 (0.70)
Speed amendments					0.016366 (1.74)	
Implicit speed amendments						0.003631 (0.37)
State fixed effects	yes	yes	yes	yes	yes	yes
Time fixed effects	yes	yes	yes	yes	yes	yes
F-test of the joint significance of violation and court red tape (p-value)	9.03 (0.001)	7.19 (0.003)	3.47 (0.059)	8.06 (0.04)	4.76 (0.03)	4.53 (0.03)
Observations	624	489	330	279	279	279
R-squared	0.97	0.97	0.99	0.99	0.99	0.99

Robust t statistics in parentheses, clustered at the level of the state. * significant at 10%; ** significant at 5%; *** significant at 1%. ● The dependent variable is the expected duration of a case in High Court, measured in number of pending cases plus number of filed cases within the year divided by the number of cases disposed of within the year (unit=years) ● violation of a precedent established by the same High Court is a cumulative variable increased by 1 forever after a High Court violated its own precedent. ● Court red tape amendments is a cumulative variable increased by 1 forever after an amendments that add procedures to the court is enacted. ● Ratio of dismissed appeals is the ratio of dismissed appeals to total appeals from the respective high court (percentage). Political controls (interacted) means the proportion of seats won by Congress parties, hard left parties, soft left parties and Bharatiya Janta parties interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process. Sc/St seats (interacted) includes the proportion of seats reserved to Scheduled Castes/Scheduled Tribes in state legislative assemblies interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process. Sc/St seats (interacted) includes the proportion of Scheduled Castes/Scheduled Tribes in the population according to censuses. Panchayats means the number of Panchayats per million capita in the state. Exp Org. of State (-2) means the proportion of total revenue expenditure spent on the Organs of State lagged two years. Speed amendments is a cumulative variable increased by 1 after any amendment likely to have an impact on the speed of the courts is passed (includes explicit speed, court red tape, defendant red tape, judgement-debtor, demand-side solution, plaintiff red tape, certainty amendments). Implicit speed amendments is the difference between speed amendments and explicit speed amendments. ● the F-test is a test of joint significance of the two instruments: violation of the precedents established by the same High Court and court red tape amendments. the p-value is presented in parentheses.

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Table III: Impact of the Expected Duration of a Trial in High Court on Agricultural Development

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	real per capita agricultural bank finance		number of account of commercial bank advances to agriculture per capita		real per capita regional rural bank credit	Irrigated Agricultural Land (Percentage)	per capita state agric dom prod
Model	OLS	OLS	IV	IV	IV	IV	IV
duration	-32.734788		-216.993629	-47.512413	-43.649922	-32.944503	-0.494391
	(1.49)		(2.98)***	(3.61)***	(2.69)**	(3.11)***	(2.42)**
violation of a precedent established by the same High Court		-10.999666					
		(3.29)***					
Court red tape amendments		-1.143195					
		(4.26)***					
Ratio of dismissed appeals	-0.041734	0.056338	-0.335468	-0.031661	-0.110393	-0.101188	-0.000354
	(0.50)	(0.68)	(1.22)	(0.47)	(2.80)**	(2.60)**	(0.30)
Panchayats	0.005252	0.006108	-0.139389	-0.027992	-0.024664	-0.034870	-0.000286
	(0.16)	(0.30)	(1.25)	(1.10)	(1.12)	(1.80)*	(0.73)
Exp. Org. Of state (-2)	-0.478392	-0.185783	0.715022	0.177972	0.285049	0.214765	0.003993
	(1.21)	(0.82)	(0.43)	(0.44)	(0.85)	(0.81)	(0.78)
Political controls (interacted)	yes	yes	yes	yes	yes	yes	yes
Sc/st seats (interacted)	yes	yes	yes	yes	yes	yes	yes
Overid test (p-value of F-test)			0.131	0.243	0.41	0.155	0.991
Hausman test (p-value of chi2)			132.5(0.00)	23.07(0.68)	61.77(0.00)	1.06(1.00)	191.77(0.00)
Observations	264	264	264	264	248	279	279
R-squared	0.90	0.92	0.77	0.87	0.77	0.98	0.97

Robust t statistics in parentheses, clustered at the level of the state. * significant at 10%; ** significant at 5%; *** significant at 1%. • In columns 1, 2, 3, the dependent variable is the real per capita agricultural bank finance (total). In column 2, a reduced form specification is presented, including the two variables (conflicting judicial decisions and court red tape amendments) found to have an influence on the duration of a case in Table 2. • Ratio of dismissed appeals is the ratio of dismissed appeals to total appeals from the respective high court (percentage). Panchayats means the number of Panchayats per million capita in the state. Exp Org. of State (-2) means the proportion of seats won by Congress parties, hard left parties, soft left parties and BJP parties interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process. Sc/St seats (interacted) includes the proportion of seats reserved to Scheduled Castes/Scheduled Tribes in state legislative assemblies interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process and the proportion of Scheduled Castes/Scheduled Tribes in the population according to censuses. In columns 3, 4, 5, 6, 7, duration is instrumented with violation of a precedent established by the same high court and court red tape amendments.• The overid test in columns 3, 4, 5, 6, 7 is a test of joint significance of both instruments in a regression of the fitted residuals from the second-stage on these instruments.• The Hausman test is a test of the equality of coefficients between OLS and IV. Under H0, OLS and IV are consistent and the coefficients should be equal. The chi2 value and the p-value of the chi2 is presented.

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Table IV: Impact of the Expected Duration of a Trial in High Court on Output in India

	(1)	(2)	(3)	(4)
	log per cap st manufacturing (reg +unreg) dom prod	log per cap st reg man dom prod	log per cap st trade restaurants dom prod	urban head count poverty index
Model	IV	IV	IV	IV
duration	-1.245632	-2.173269	-0.904759	36.635377
	(1.96)*	(2.64)**	(2.02)*	(3.43)***
Ratio of dismissed appeals	-0.002890	-0.005214	-0.001945	0.101307
	(1.48)	(1.72)	(1.26)	(2.21)**
Panchayats	-0.001270	-0.001563	-0.000868	0.017035
	(1.68)	(1.26)	(2.43)**	(1.00)
Exp. Org. Of state (-2)	0.005826	0.014905	0.002833	-0.156514
	(0.54)	(0.70)	(0.62)	(0.56)
Political controls (interacted)	yes	yes	yes	yes
Sc/st seats (interacted)	yes	yes	yes	yes
Overid test (p-value of F-test)	0.075	0.378	0.997	0.999
Hausman test (p-value of chi2)	1011.41(0.00)	148.12(0.00)	7.53(0.99)	788.90(0.00)
Observations	279	279	195	279
R-squared	0.97	0.93	0.99	0.87

Robust t statistics in parentheses, clustered at the level of the state. * significant at 5%; *** significant at 1%. In columns 1, 2, 3, 4, 5, 6, 7, duration is instrumented with violation of a precedent established by the same high court and court red tape amendments. ● Ratio of dismissed appeals is the ratio of dismissed appeals to total appeals from the respective high court (percentage). Panchayats means the number of Panchayats per million capita in the state. Exp Org. of State (-2) means the proportion of total revenue expenditure spent on the Organs of State lagged two years. Political controls (interacted) means the proportion of seats won by Congress parties, hard left parties, soft left parties and BJP parties interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process. Sc/St seats (interacted) includes the proportion of seats reserved to Scheduled Castes/Scheduled Tribes in state legislative assemblies interacted with a dummy indicating when the legislative assemblies are likely to influence the judicial process and the proportion of Scheduled Castes/Scheduled Tribes in the population according to censuses. In column 2, an OLS specification is presented. ● The overid test in columns 1, 2, 3, 4, 5, 6, 7 is a test of joint significance of both instruments in a regression of the fitted residuals from the second-stage on these instruments. ● The Hausman test is a test of the equality of coefficients between OLS and IV. Under H0, OLS and IV are consistent and the coefficients should be equal. The chi2 value and the p-value of the chi2 is presented.

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DATA APPENDIX 1: EXAMPLES OF OTHER AMENDMENTS

	original rule	amendment	codification
"defendant red tape"	Order 21—Execution of Decrees and Orders, Rule 2, Sub-Rule 2: Payment out of Court to decree-holder.- (2) The judgement-debtor or any person who has become surety for the judgement-debtor may also inform the court of such payment or adjustment[...].	The Bombay High Court amendment of 1983: Payment out of Court to decree-holder.- (2) The judgement-debtor or any person who has become surety for the judgement-debtor may also inform the court *by an application in writing supported by an affidavit* of such payment or adjustment [...].	1 after 1983 for Maharashtra
"poor"	Order 33–Suits by Indigent Persons, Rule 2 specifies that the High Court may make rules providing for the mode of selecting pleaders to be assigned and the facilities to be provided to such pleaders by the Court.	The Haryana High Court rules enacted in 1981 are the following: the pleader has to have at least 5 years of experience; the system is based on willingness by the pleader; if pleader does not accept to plead free of charge, he will be paid on the state budget for a maximum of 300Rs; the legal aid has 7 days to prepare; additional bonuses of up to 150 Rs are available; the judge has a duty to convince competent senior lawyers to enlist themselves.	1 after 1981 for Haryana
"agricultural"	Order 21-Execution of Decrees and Orders, Rule 75(2): Special Provision relating to growing crops.- Where the crop from its nature does not admit of being stored, it may be sold before it is cut and gathered, and the purchaser shall be entitled to enter on the land, and to do all the necessary for the purpose of tending and cutting or gathering it.	Special Provision relating to growing crops.- Where the crop from its nature does not admit of being stored, or where it appears to the Court that the crop shall be sold to greater advantage in an unripe state, it may be sold before it is cut and gathered, and the purchaser shall be entitled to enter on the land, and to do all the necessary for the purpose of tending and cutting or gathering it.	1 after 1987 for Goa, Dadra and Nagar Haveli
"business"	additional Rule 5 of Order 15-Disposal of Suit at the First Hearing inserted in Uttar Pradesh in 1972: "Striking of defence on non-deposit of admitted rent.– In any suit by a lessor for the eviction of a lessee from any immovable property after the determination of his lease, and for the recovery from him of rent in respect of the period of occupation thereof during the continuance of the lease, and for the recovery from him of rent in respect of the period of occupation thereof during the continuance of the lease, [...], the defendant shall, at or before the first hearing of the suit, [...], deposit the entire amount of rent, or compensation for use and occupation, admitted by him to be due, and thereafter throughout the continuance of the suit, deposit regularly the amount of monthly rent,[...], and in the event of any default in this regard, the court may,[...], strike-off his defence."	"Striking of defence on non-deposit of admitted rent.- In any suit by a lessor for the eviction of a lessee from any immovable property after the determination of his lease, and for the recovery from him of rent in respect of the period of occupation thereof during the continuance of the lease, [...], the defendant shall, at or before the first hearing of the suit, [...], deposit the entire amount of rent together with interest thereon at the rate of 9% per annum, or compensation for use and occupation, admitted by him to be due, and thereafter throughout the continuance of the suit, deposit regularly the amount of monthly rent within a week,[...], and in the event of any default in this regard, the court may,[...], strike-off his defence."	1 after 1972, and another 1 after 1977 for Uttar Pradesh

DATA APPENDIX 1 CONTINUED

"government"	Order 45-Appeals to the Supreme Court, Rule 7 specifies the security an appellant has to provide for the costs of the respondent and to defray the expenses of translating, transcribing, transmitting a copy of the whole suit to the Court.	Rule 7-A is added in the Gujarat High Court in 1983: "Security not to be demanded from Union or State Government or Government servant defended by Government. [...]"	1 after 1983 for Gujarat
"judgement-debtor"	Order 21-Execution of Decrees and Orders, Rule 40: "Proceedings on appearance of judgement-debtor in obedience to notice or after arrest.- (2) Pending the conclusion of the inquiry [...] the Court may, in its discretion, order the judgement-debtor to be detained in the custody of an officer of the Court or release him on his furnishing security to the satisfaction of the Court for his appearance when required."	"Proceedings on appearance of judgement-debtor in obedience to notice or after arrest.- (2) Pending the conclusion of the inquiry [...] the Court may, in its discretion, order the judgement-debtor to be detained in the custody of an officer of the Court on the decree-holder depositing in Court the necessary amounts payable to the judgement-debtor and the Officer of the Court in connection with such detention, or release him on his furnishing security to the satisfaction of the Court for his appearance when required."	1 after 1990 for Kerala
"demand-side solution"		Order 1-Parties to Suits, the new rule 3-B added in Madhya Pradesh in 1984: "Conditions for entertainment of suits.- No suit or proceeding for declaration of title or any right over any agricultural land, with or without any other relief or for specific performance of any contract for transfer of any agricultural land with or without any other relief shall be entertained by any Court, unless the plaintiff, knowing that a return under section 9 of the Madhya Pradesh Ceiling on Agricultural Holdings Act, 1960, [...] is required to be filed by him, has impleaded the State of Madhya Pradesh as on of the defendants [...]."	1 after 1984 for Madhya Pradesh
"plaintiff red tape"	Order 7-Plaint, Rule 9: "Procedure on admitting a plaint.- (1A)The plaintiff shall, within the time fixed by the Court [...], pay the requisite fee for the service of summons on the defendants."	"Procedure on admitting a plaint.- (1A)The plaintiff shall, within the time fixed by the Court [...], file summons in the prescribed form, in duplicate, after being dully filled in, for each of the defendants and pay the requisite fee for the service of summons on the defendants."	1 after 1982 for Punjab and Haryana
"certainty"	Order 21-Execution of Decrees and Orders, Rule 69: "Adjournment or stoppage of sale.- The Court may, in its discretion, adjourn any sale hereunder to a specified day and hour, and the officer conducting any such sale may in his discretion adjourn the sale to a specified day and hour, recording his the sale, recording his reasons for such adjournment, [...]."	Adjournment or stoppage of sale.- The Court may, in its discretion, adjourn any sale hereunder to a specified day and hour, and the officer conducting any such sale may in his discretion adjourn the sale to a specified day and hour, recording his reasons for such adjournment, [...].	1 after 1983 for Maharashtra

DATA APPENDIX 2: HISTORY OF THE AMENDMENTS TO THE CODE OF CIVIL PROCEDURE IN ALLAHABAD (SELECTED AMENDMENTS)

page	order	rule	year	synopsis	implicit speed	explicit speed	speed court	court tape	court red	defendant red tape
81	3-Recognised Agents and Pleaders	4-Appointment of a pleader	1994	appointment of a pleader in force until all proceedings ended (more proceedings added in this amendment, e.g. a proceeding for revision of an order in the suit, proceedings for transfer) (=more quality)	-1					
81	3-Recognised Agents and Pleaders	4-Appointment of a pleader	1994	the pleader cannot plead if he doesn't have a memorandum signed by him that he has instructions from his client to appear, act or plead (=less speedy but better quality)						1
86	4-Institution of Suits	1-Suits to be commenced by plaint	1926	the plaint has to be given with a copy of the service with the summons. The court can grant time for that.	-1					
88	5-Issue and Service of Summons	2-Copy of plaint annexed to summons	1926	the defendant cannot be permitted to replace the plaint by a concise statement.	-1					1
89	5-Issue and Service of Summons	4-No party to be ordered to appear in person unless resident with certain limits	1926	the court can dispense with the service of any defendant who did not appear	1					
92	5-Issue and Service of Summons	9A-Summons given to the plaintiff for service	1958	the court must send the summons to the defendant by post to his adress (as well as to him personnally) (=more red tape)				1		
97	5-Issue and Service of Summons	21-Service of summons where defendant resides within jurisdiction of another court	1967	if defendant resides in jurisdiction of other court, can send the summon by post. If not returned, considered received. (=less red tape)	1			-1		
99	5-Issue and Service of Summons	21-Service where defendant resides out of India and has no agent	1999	the only way to summon a defendant is by post as opposed to all the new ways of communication: fax, email accepted in 1999. (=therefore I put a -1 starting in 1999	-1					1
100	5-Issue and Service of Summons	25A1-Service where defendant resides out of India and has an agent empowered to accept service of summons	1962	if the defendant has an agent, the summon can be sent to him	1					1
122	7-Plaint	19-25	1970	make sure it is the right jurisdiction, dismiss the case if bad adress, post summons if defendant not present, party must inform the court if change of adress	-1					1
131	8-Written statement, set-off and counter-claim	11-12	1971	every party shall give its adress to the court	-1					1

DATA APPENDIX 2 CONTINUED

page	order	rule	year	synopsis	implicit speed	explicit speed	speed court	court tape	red	defendant red tape
189	19-Affidavits	1-15	1981	if one party is absent, an affidavit can be given to proceed (more fair but less speedy than simple dismissal of the case if one party not present)	-1					
194	20-Judgement and decree	7A-ormal order	1981	a party which wants to appeal can apply for a formal order (=memorandum of costs, adjudication...)				1		
248	21-Execution of decrees and orders	54-Attachement of immovable property	1983	attachement of immovable property (=impossibility to sell) is proclaimed at the date of the order (=can cancel a sell)						
292	25-Security of costs	1-When security of costs may be required from plaintiff	1983	minor change						
294	26-Commissions	1-Cases in which Court may issue commission to examine witness	1980	the court for speed reasons may issue a commission to interrogate witnesses. (note: commission: send somebody to interrogate a witness if the witness is far, sick...=good for speedy justice)		1	1			
294	26-Commissions	1-Cases in which Court may issue commission to examine witness	2002	cancelled by 1999 amendment (wef 2002)		-1	-1			
294	26-Commissions	3-Where witness resides within Court's jurisdiction	1980	a high court cannot issue commission, a court can say if it wants the commission to be returned to a subordinate court		1				
295	26-Commissions	4-Persons for whose examination commission may issue	1980	Omit Rule 4: a commission can be issued for somebody resident beyond the limits of the jurisdiction, or for a civil servant		-1	-1			
295	26-Commissions	4-Persons for whose examination commission may issue	1980	Omit Rule 4 (2): a court can say if it wants the commission to be returned to a subordinate court		-1				
295	26-Commissions	7-Return of commission with depositions of witnesses	1980	the evidence obtained in a commission is regarded as evidence, with or without the consent of the party against whom testimony is made. (more speedy, no exceptions to the evidence in a commission, even for person in the service of Government)	1					
357	37-Summary procedure	1-Courts and classes of suits to which the order is to apply	1975	other courts means district judges, civil judges, munsifs						
367	39-Temporary injunctions and interlocutory orders	3A-Court to dispose of application for injunction within 30 days	1981	rule of 1976 amendment omitted: the application of injunction shall be dealt with in 30 days.		-1				

DATA APPENDIX 2 CONTINUED

page	order	rule	year	synopsis	implicit speed	explicit speed	speed court	court red tape	defendant red tape
374	41-Appeals from original decrees	1-Form of appeal. What to accompany memorandum	1994	that rule omitted: if appeal against a decree for money, such money must be deposited by the appelant (=less incentive to appeal)					
378	41-Appeals from original decrees	5-Stay by appelate Court	1994	that 1976 rule: the appelant has to give security for the court to make an order to stay the execution of the decree; is only for decree for payment of money. (+time limit fixed by court).			1		
382	41-Appeals from original decrees	14-Publication and service of notice of day for hearing appeal	1981	the amendment makes sure that the pleader is competent to receive the notice on the behalf of the defendant (maybe more speedy)	1				
387	41-Appeals from original decrees	22-Upon hearing respondent may object to decree as if he had preferred separate appeal	1994	adds ambiguity to the time allowed: is it hearing of the appeal or appearance in the appeal??	-1				
404	45-Appeals to the Supreme Court	3-Inquiry as to whether applicant is an indigent person	1987	exact same rule turned upside down					
419	48-Miscellaneous	10	1983	the adresses of the parties shall hold good during a review (=more certainty, more red tape court)				1	
446	Appendix B-Process	Form N. 1-A	1987	possibility to summon/notice for service by advertisement in a newspaper	1				

DATA APPENDIX 3

Variable	Range	Source	Mean	St. Dev.
Court data				
Expected duration of a trial in High Court	1971-1996	Law commission reports, Annual Report, Ministry of Law, Justice and Company Affairs and archives of the Supreme Court of India	1.7	0.77
Control Variables				
Proportion of seats reserved for Scheduled Castes, Tribes in the legislative assemblies*	1971-1992	Election Commission document relating to election in a state	0.28502	0.14009
Proportion of Scheduled Castes, Tribes in the population	1971-1992	Census.	0.22029	0.08153
Proportion of Congress seats (Indian National Congress, Indian Congress Socialist, Indian National Congress Urs	1957-1990	"India decides: Elections 1952-1991", by Butler, Lahiri and Roy (1991).	0.46163	0.25201
Proportion of hard left seats (Communist Party of India + Communist Party of India Marxist)			0.07952	0.14119
Proportion of soft left seats (Socialist Party + Praja Socialist Party)			0.02475	0.04278
Proportion of Hindu parties (Bhartiya Janata Party + Bhartiya Jana Sangh)			0.1571	0.21055
Number of Panchayats per million capita	1971-1996	Central Statistical Organisation	325.47	319.096
Share of the State Expenditure for the Organs of State out of the total revenue expenditure	1972-1992	Public Finance Statistics, Ministry of Finance, Government of India	10.2634	10.1331
Ratio of dismissed appeals	1971-1996	Supreme Court Judgements, 2000 CDROM, ratio of dismissed appeals to toal appeals from the respective High Court.	55.42	15.0107

DATA APPENDIX 3 CONTINUED

Economic Outcomes

real per capita agricultural bank finance (total)		Statistical Tables relating to Banks in India, Reserve Bank of India	43.04	37.19
number of account of commercial bank advances to agriculture per capita	1971-1996		16.42	13.84
real per capita regional rural bank credit			8.78	7.35
Percentage of Irrigated Agricultural Land	1971-1993	IFPRI	30.65	20.8
per capita state agricultural domestic product '00000Rs			1.864	0.947
log state domestic product of manufacturing		Central Statistical Organisation and Indian Statistical Institute	0.69	1.29
log state domestic product of registered manufacturing	1971-1996		0.12	1.45
log state domestic product of unregistered manufacturing			-0.25	1.18
log per capita state trade, hotel and restaurants domestic product			1.68	0.74
log per capita state banking and insurance domestic product			0.42	1.04
log per capita state real estate domestic product			0.06	0.88
Urban Head Count Index (percentage)	1958-1992, 1994	"A database on Poverty and Growth in India", prepared by Ozler, Datt, Ravallion (1996)	41.2053	13.5433