Daniel Berkowitz and Karen B. Clay, Initial Conditions and the Evolution of

Institutions (Book Project), May 2008

Chapter 5: State Courts and Initial Conditions

Our goals for this chapter are straightforward: we wish to show that initial

conditions are related to the quality of state courts and that the initial conditions appear to

act through a variety of inputs into the state judicial system. These inputs include state

decisions regarding judicial selection and retention, judicial tenure, whether and when to

adopt intermediate appellate courts, and how much money to allocate to courts and to

judicial salaries. Unfortunately, our measure of the quality of state courts only covers a

small number of years in the early twenty-first century. The good news is that we are

able to measure many of inputs over long periods of time. And we show that these inputs

tend to be highly persistent. If the relationship between the inputs and the quality of state

courts is stable over time – something that we can only speculate on – then the quality of

state courts is also likely to have been persistent over time as well.

State Courts: The Challenge of Measuring Quality

Ideally, measurement of the quality of state courts would involve experienced

judges, preferably at the federal appellate level or higher, reviewing a large random

sample of state court cases and grading the state courts based on the quality of their legal

reasoning in multiple time periods. For expediency, attention could be restricted to the

state supreme court, although the work of that court might not be representative of state

courts as a whole. Unfortunately, such a study has never been done and, given the large

costs in terms of time and money that such a study would require, may never be done.

The closest we come is a series of annual surveys conducted in the years 2002-2007 by the Institute for Legal Reform of the U.S. Chamber of Commerce that measured the quality of state courts. A nationally representative sample of senior attorneys who work for companies with annual revenues of at least $100 million were asked to grade courts in states where they had practiced. Table 5.1 provides summary information about each year of the survey including the number of respondents, and the average number of states evaluated by each respondent.

Table 5.1 here

During 2002-2005, each state was ranked along ten dimensions including: 1) the overall treatment of tort and contract litigation, 2) timeliness of summary judgment/dismissal, 3) discovery, 4) scientific and technical evidence, 5) judges' impartiality, 6) judges' competence, 7) juries' predictability, 8) juries' fairness, 9) treatment of class action suits and 10) punitive damages. Attorneys assigned state court grade of "A", "B", "C", "D", or "F" and these grades rescaled from 0 to 100. A score of 100, 80, 60, 40 and 20 represents a grade of "A", "B", "C", "D" and "F." [1] All of the key elements in each year are highly correlated with each other. Thus, following the procedure used in the surveys, we summarize court quality in each year during 2002-20005 by simply averaging over the ten categories. In 2006 and 2007 two additional

---

[1] Several states lack either punitive damages or class action suits. In these cases, the index was computed on the basis of all of the other criteria except for punitive damages or class actions suits.

characteristics were added including 11) having and enforcing meaningful venue requirements and 12) non-economic damages. Because all twelve elements are highly correlated in any particular year, the court quality index is again computed as an average of all the elements on a scale of 0 to 100. The average score during 2002-2007 was 58.4, and ranged from 32.6 in Mississippi to 75.7 in Delaware.

The survey has a number of pros and cons as a measure of the quality of state courts. We begin with the pros. First, the individuals surveyed were lawyers with actual experience in multiple state courts. As shown in Table 5.1, the average attorney evaluated 5 states in the 2002-2005 surveys and 6 states in the 2006 survey. In an attempt to allow lawyers to be more careful in their assessments, the methodology was changed so that average lawyer evaluated 3 states in 2007.[2] Second, the sample was large and grew over time. In 2002, the survey included 824 attorneys, and by 2007, it had reached 1,599 attorneys. Third, the respondents were experienced attorneys who had roughly 20 years of relevant legal experience.

Fourth, the rankings suggest that participants' perceptions of the quality of state courts were highly correlated across years. For example, the same states appear repeatedly in the "Worst 5 States" category: Alabama, Louisiana, Mississippi and West Virginia were listed every year; Illinois appeared three times; and Texas was listed twice. There were also several states that appear repeatedly in the "Best 5 States" category: Delaware was listed every year; Nebraska and Iowa appeared five times; and Virginia was listed four times. Further, the yearly ratings are highly positively correlated with one another: the lowest correlation is between 2002 and 2007 (0.90) and the highest is

---

[2] In 2001 and 2003, lawyers who evaluated at least four states represented 83-percent and 81-percent of the responses

between 2004 and 2005 (0.98). Not surprisingly, then, the yearly ratings and the average rating for 2002-2007 are highly correlated. The correlations range from a low of 0.96 in 2007 to a high of 0.99 in 2004 and 2005.

The major criticism of the survey for our purposes is that it measures, at least to some degree, the pro-business orientation of the state courts. This stems from the fact that the individuals surveyed were senior attorneys at major corporations with at least $100 million in annual sales, and many were from corporations with $1 billion or more in sales. With respect to the criticism, two points are in order. First, a pro-business orientation may be beneficial in the sense that pro-business courts may help promote economic growth, which in turn benefits state residents. Second, holding pro-business orientation constant, attorneys are likely to prefer courts that hear cases more rapidly and have lower variation in the quality of judges and juries. Thus, pro-business orientation may be only one of several factors that the attorneys were responding to when asked to rate the quality of courts.

Our confidence in the survey was increased when we found that it was correlated with other measures of the quality of state courts and institutions. These correlation patterns are summarized in Table 5.2. Our measure of the quality of state courts is negatively correlated with three measures of corruption in state government. The first two are average federal public corruption convictions per 100,000 in population. During 1992-2001, convictions averaged 2.73 per year and ranged from a low of 0.41 in Colorado to a high of 7.1 in Mississippi. During 1982-1991, convictions averaged 3.32 per year and ranged from a low of 0.79 in Washington State to 7.84 in Tennessee. The correlations between these measures of corruption and the quality of state courts are -0.47

for 1992-2001 and -0.40 for 1982-1991. One concern is that federal convictions measure not just corruption, but also federal efforts to prosecute corrupt state officials. Boylan and Long (2003) surveyed state house reporters' perceptions of corruption in the state legislatures in 1999 in 45 states. House reporters perceived South Dakota to be the least corrupt state and New Mexico to be the most corrupt state. The correlation between perceived corruption and the quality of state courts is -0.40. This suggests that federal convictions reflect, at least in part, actual corruption.

Table 5.2 here

The correlations are not limited to corruption, although those correlations are the strongest. The quality of state courts is negatively correlated with judicial activism in the mid 1980s (-0.32). By judicial activism, we mean the willingness of judges in the state court of last resort to rule that state legislation should be nullified because it is contrary to the state constitution. We use data from Beavers and Emmert (2000) which include all 3,024 constitutional challenges heard by state supreme courts between 1981 and 1985 for civil and criminal cases. In 550 of the cases, state court of last resort judges ruled that state legislation was, at least in part, unconstitutional. Judicial activism is measured as the share of cases during 1981-85 in which state courts that at least in part ruled against their legislatures. Such activism may be positive when it involves overturning unconstitutional laws. However, it can also be negative if judges are pushing their own political agendas or if activism makes legal outcomes less predictable.

The quality of state courts is also positively correlated with legal professionalism in the early 1970s (0.28). The Glick and Vines (1973) index of legal professionalism is a composite score of five major characteristics of state courts systems including the method of selection for judges in all courts; state court organization; whether states had a professional administrator with a sufficiently large and competent staff; tenure of office for judges of major trial and appellate courts, and level of basic salary for judges of major trial and appellate courts exclusive of fees and local payments. Each characteristic involved scoring the state on a five-point scale according to how closely judicial features in the state approached the American Bar Association (ABA) model and each was measured prior to 1973 and states were ranked on scale going from 1 (worst) to 48 (best). The five worst states were Mississippi, Arkansas, Alabama, West Virginia, and Indiana. The five best states were California, New Jersey, Illinois, Massachusetts, and New York.

The quality of state courts exhibited more modest correlations of the appropriate sign with judicial removals per capita, the political attitude of state supreme courts judges during 1960-93, and the citation of a state's supreme court as of 1975 (-0.22, -0.22, and 0.10). Judicial removal captures both the quality of judges and the extent to which judges can be easily bullied by legislatures and state politicians and administrators.[3] Not surprisingly, states with more removals also had lower quality courts. The political attitude of state supreme court judges, 1960-93, is a measure of the ideology of these judges.[4] States with more liberal state supreme courts were viewed as having lower quality courts. The reputation of a state supreme court in 1975 is based upon the number

---

[3] Gray (2002).
[4] Ideology was computed for 900 judges at the time of appointment or election. See Brace, Langer, and Hall (2000) for a detailed explanation of this variable. Our measure is the ideology of the median judge in each state.

of citations of that court's opinions by other supreme courts in 1975.[5] States with more citations had slightly higher quality courts.

In sum, although the survey is not ideal, it appears to be informative with respect to the quality of state courts. The survey's measure of the quality of state courts is correlated with several related measures of institutions and judges, which adds to its credibility. In addition to being a credible measure, it is the only measure – there are no other direct measures of the quality of state courts.

Initial Conditions and the Quality of State Courts

In this section, we demonstrate that state initial conditions appear to be systematically related to the average quality of state courts in 2002-2007. We use climate, civil law, transport and culture as initial conditions. We also consider the influence of the occupational composition of the state elite and the state median, the wealth share of the state elite, and soldier mortality, since these variables arguably influence state courts as well as state legislatures.

The important and somewhat unanswered question is why initial conditions at time of settlement would have left an imprint on state courts at the beginning of the twenty-first century. In the rest of this chapter, we focus two things. First, we establish that initial conditions are strongly associated with quality of state courts. Second, we show that initial conditions are strongly associated with inputs for state. We build on these findings in the next chapter, where we explain the mechanisms through which initial conditions act on state courts.

---

[5] Caldeira (1983).

In Table 5.3, we investigate the relationship between initial conditions and the quality of state courts. For ease of interpretation, we have standardized court quality and our continuous explanatory variables to have means of zero and standard deviations of one. In column (1) where we include climate, civil law, transportation and culture, only the coefficient on civil law is statistically significant. However, as we have already argued in Chapters 3 and 4, it is difficult to separately identify the influence climate and culture in a cross-section with only 48 states.[6] Thus, in columns (2) and (3) we exclude culture and then climate. Climate and culture, when included individually, are each statistically significant and are each associated with roughly a 0.35 standard deviation decline in court quality. This is roughly the difference between Arkansas and Wyoming. Arkansas has a warmer and wetter climate, a more traditionalistic political culture, and court quality that is 0.83 of a standard deviation below average. Wyoming has a cooler and drier climate, a less traditionalistic political culture, and court quality that is 0.49 of a standard deviation below average.

Table 5.3 here.

More importantly, in columns (1), (2), and (3) civil law is associated with roughly 0.85 of a standard deviation decline in court quality, which roughly accounts for the difference between the civil-law state of Florida and the common-law state of Vermont. In Florida court quality is 0.55 of a standard deviation below average, while in Vermont court quality is 0.41 of a standard deviation above average. Unlike climate and civil law,

---

[6] Even though climate and culture are statistically insignificant individually, the test statistic at the bottom of column (1) in Table 5.3 shows they cannot be jointly excluded.

the influence of transportation is small and statistically insignificant in all three regressions.

In column (4), we present the results from the specification in column (2), when we restrict the sample to 28 states. We do this to facilitate comparison with the next set of results. It is worth noting that relative to column (2), the fit in column (4) is considerably better. Initial conditions are a better predictor of the quality of state courts for states that had entered the union by 1860, than for all states. The coefficients on climate and civil law in column (4) are also somewhat more negative than the coefficients on climate and civil law in column (2).

In Chapter 4 we evaluated four possible mechanisms – HHI of the elite, HHI of the median, wealth of the elite and soldier mortality – through which initial conditions may have acted on state political competition. We found that the occupational composition of elites during the antebellum period (HHI of the elite) was the best predictor of the subsequent evolution of state political competition. Because state legislatures interact with and have substantial power over state courts, we are interested in whether HHI of the elite is related to the quality of state courts.

In Table 5.4, we drop climate, culture, and transportation and run simple horse races between civil law and our four mechanism variables. In columns (1)-(4), the effect of civil law on the quality of state courts is negative, statistically significant, and large. In addition, three of the four mechanism variables – HHI of the elite, HHI of the median, and soldier mortality – have negative and statistically significant impacts on the quality of state courts. Thus, states with more concentrated elites and medians and states with higher mortality also had lower ranked courts.

As measured by R-squared, HHI of the elite (column (1)) provides the best fit, with an R-squared of 0.54, followed by the HHI of the median (column (2)), which has an R-squared of 0.50. Despite the fact that the wealth share of the state elite was not statistically significant, column (3) has an R-squared of 0.49. Soldier mortality (column (4)) has the lowest R-squared at 0.40. It is worth noting that all of these specifications provided a worse fit than the fit provided by initial conditions in the 28 states in column (4) of Table 5.3. It appears that civil and HHI of the elite do not fully capture the effects of initial conditions on state courts.

Taken together, the results in Tables 5.3 and 5.4 suggest that the quality of state courts at the beginning of the twenty-first century were influenced by conditions at the time settlement.

Table 5.4 here

Determinants of the Quality of State Courts

Figure 5.1 outlines the relationship between initial conditions, inputs into the court system, and the quality of state courts. We begin by showing that these inputs are related to the quality of state courts. We then discuss each of these inputs and their relationship to initial conditions. We are able to measure many of these inputs over long periods of time. And we show that these inputs tend to be highly persistent. If the relationship between the inputs and the quality of state courts is stable over time – something that we can only speculate on given that we only have data for 2002-2007 – then the quality of courts is also likely to have been persistent over time as well.

Figure 5.1 here

In what follows, we will examine the relationships between the quality of courts and the three categories of inputs into the state judicial system. We begin by discussing the inputs. A general definition of judicial independence is that "judges are not subject to the influence of some other actor(s): they are the authors of their own decisions."[7] Judges' independence is determined in large part by what judges need to do to remain in office.[8] Partisan elections are widely considered to give state officials in the legislative and executive branches the most control over state court judges, because judges need to be re-elected to retain their positions. In particular, they need to participate in party primaries, give campaign speeches, and seek political contributions within the party. These activities tend to leave them in the debt of party officials, both within the legislative and executive branches and outside of the branches. Non-partisan elections have some of these features as well, but tend to require less cultivation of party officials and in some cases less fundraising. Thus, other methods of retaining judges including non-partisan elections and appointment based procedures are associated with greater judicial independence. Judges with longer tenure are also relatively more insulated than judges with shorter tenure. Similarly, judges in states with fewer judicial removals per capita are relatively more insulated than judges with more judicial removals per capita. Finally, more independent judges may inclined to be more activist, in the sense that they are more willing to declare legislation unconstitutional.

---

[7] Kornhauser (2002), p.48.
[8] Retention methods can be distinct from how judges are initially selected, although the two methods tend to coincide. For example, judges subject to partisan or non-partisan retention elections were typically initially selected by those methods. We focus on retention methods, because these determine the incentives that sitting judges face.

Workload and resources also affect the quality of state courts. Intermediate appellate courts reduce the workload of the state court of last resort, allowing it to have greater control over its docket. Higher judicial budgets per capita may also be associated with higher quality outcomes, through the number and quality of the personnel. The relative judicial budget, computed as the judicial budget divided by the legislative budget, may be a better measure of the resources going to courts. It accounts for the extent to which state legislatures are letting go of scarce budgetary resources.

Political competition – although not explicitly included in Figure 5.1 – affects all three categories. It affects judicial independence, since state legislatures with higher levels of political competition have a more difficult time reaching the number of votes to recall or otherwise punish judges who make unpopular decisions.[9] Political competition can affect workload through the creation of additional courts and through the creation of mandatory review for certain types of cases. And political competition can affect resources, since budgets are set annually.

Column (1) of Table 5.5 shows the mean for nine variables related to judicial independence, workload, and resources. The variables are measured over the period 1970-1990. The average value of the Ranney index was 64. Mississippi, Arkansas and Louisiana had the lowest values of the Ranney index at 11.5, 12.2 and 12.6, while Illinois, Pennsylvania and New York had the highest values at 91.4, 93.2 and 95.2. In 80 percent of the state-years there were no partisan retention elections. In 53 percent of the state-years there were no competitive retention elections, whether partisan or non-partisan. The average judicial budget was $16.29 per capita (in 2000 dollars). At the low

---

[9] Political competition also indirectly affects the quality of state courts, because it is a determinant of methods of judicial selection (Hanssen 2004b).

end, Indiana, Mississippi and Texas spent between $5.23 and $5.53, while at the high end

Delaware spent $49.04. The average ratio of judicial to legislative budgets was 3.0, and

it varied from 0.7 in Washington State to 10.5 in North Carolina. State supreme courts

ruled that legislation was unconstitutional in 9 percent of cases, on average. In the

average state 0.6 judges were removed per 1,000,000 in population between 1990 and

2001. Sixty-one percent of states had intermediate appellate courts. Finally, the average

judicial term was 8.3 years.

Table 5.5 here.

Column (2) of Table 5.5 summarizes the correlations between the quality of state

courts and the nine variables. The Ranney index is strongly positively correlated (0.60)

with the quality of state courts. Not having partisan elections and not having elections are

positively correlated (0.58 and 0.34) with the quality of state courts. Judicial budget per

capita and relative judicial budget are also positively correlated (0.33 and 0.24) with the

quality of state courts. Judicial activism and judicial removal are both negatively

correlated (-0.32 and -0.26) with the quality of state courts. Both having intermediate

appellate courts and the length of the judicial term are uncorrelated with the quality of

state courts (-0.09 and 0.04).

Table 5.6 reports the results of regressions of court quality in 2002-2007 on the

variables from Table 5.5. In column (1) we include the Ranney index and the two

judicial selection variables – no partisan and no elections. The coefficient on the Ranney

index is positive, statistically significant and large. The variable no partisan elections is

statistically significant and positively associated with court quality, while the variable no elections is not.

In column (2), we drop the variable no elections and add the two judicial budget variables. Relative judicial budget is statistically significant and positively associated with court quality, while the judicial budget per capita is not statistically significant. The coefficients on the Ranney index and no partisan elections remain positive and statistically significant.

In column (3) we drop judicial budget per capita and add four variables – judicial term, judicial removals, judicial activism, and whether the state had intermediate appellate courts. Of the four new variables, only judicial activism was statistically significant. Thus, in column (4) we drop the three statistically insignificant variables.

Overall, we find states with greater political competition, no partisan retention elections, less judicial activism, and higher relative judicial budgets during 1970-1990 had higher quality courts in 2002-2007. The effects in column (4) of the Ranney index, no partisan elections, relative judicial budgets and judicial activism range in absolute value from 0.237 to 0.465 of a standard deviation in court quality. To give some sense of what these magnitudes might mean, the difference between Pennsylvania (higher quality courts) and Florida (lower quality courts) is roughly 0.40 of a standard deviation in court quality. One other thing to note is that the fit in column (4) of Table 5.6 (R-squared of 0.61) is substantially better than the fit in Table 5.3 (R-squareds of 0.37-0.39), where we only included initial conditions. The fact that contemporary variables would provide a better fit than initial conditions is not surprising, but is nonetheless of interest.

Table 5.6 here.

Retention

As we promised earlier, in this sub-section and the ones that follow, we discuss the input variables in more detail and investigate the extent to which they are related to state initial conditions. We will investigate the reasons for these relationships and their variation over time in detail in Chapter 6.

The spectrum of judicial independence could, in principle, run the gamut from judges who are fully subordinate to state legislatures to judges who are completely independent of state legislatures. The five state-level judicial retention procedures currently in use fall in between these two extremes. Of the five, merit based appointment is widely regarded as leading to the most independent judiciary, and partisan elections as leading to the least independent judiciary.[10] The three others – non-partisan elections and non-merit appointment by the legislature or the governor – fall in between.

Numerous scholars and public officials have publicly opposed the partisan election of judges. In a 1906 address to the American Bar Association, the renowned legal scholar Roscoe Pound argued that "putting courts into politics, and compelling judges to become politicians in many jurisdictions. . . [has] almost destroyed the traditional respect for the bench."[11] The American Bar Association (ABA) was instrumental in the development of merit plans in the 1930s and in their adoption in some

---

[10] Hall (2001) questions whether judicial reform has been effective.
[11] 29 A.B.A. Rep. 395, 410-411 (1906), *reprinted in* 8 Baylor L. Rev. 1, 19-20 (1956)

states beginning in the 1940s. The ABA is also on record as opposing both partisan and non-partisan judicial elections.[12]

Judicial retention procedures vary across states and have varied at the state level over time. Hanssen (2004a) divides historical trends in how judges were selected and retained into four periods. During the earliest period (1790-1847), all judges were appointed, either by the legislature or by the governor, or jointly with one nominating and the other confirming. This retention process reflected a number of issues including the primacy of the early legislatures, a lack of distinction between lawmaking and judging, and a distrust of Colonial judges, many of whom had been loyal to the crown. During the second period (1847-1910), 20 of the 29 existing states and all 17 of the new states adopted partisan elections. This change was in response to popular concerns about legislatures and a perceived need for state courts to be independent of state legislatures. The result was the direct election of judges. Partisan elections forced judges to participate in the same processes as other political actors, leading to many of the same problems. In response, 17 of the 46 existing states and one of the two new states adopted non-partisan elections in the third period (1910-1958).[13] Although perceived to be an improvement, many felt that judges were still inadequately insulated from the political process. Thus, in 1940, California and Missouri implemented a full merit system under which appellate judges and judges in the court of last resort were selected by an expert panel based on merit. By 1990, 16 of the 48 continental states had adopted the merit retention plan for their appellate judges.

---

[12] BE IT RESOLVED, that the American Bar Association urges state, territorial, and local bar associations in jurisdictions where judges are elected in partisan or non-partisan elections to work for the adoption of merit selection and retention, and to consider means of improving the judicial elective process." www.abanet.org/govaffairs/judiciary/rappd.html

[13] Mississippi is an outlier – it introduces partisan elections in 1914.

It is worth noting that the ABA was not entirely a disinterested party with respect to adoption of the merit system. Lawyers on average benefit from the adoption of the merit systems in two ways.[14] First, they typically have greater input into who becomes a judge than under other systems. Second, the number of cases filed increases. The reason is that independent judges are less predictable, making it more worthwhile to file cases than it was when judges were more predictable.

The existence of variation in judicial selection and retention over time and across states has led to a substantial empirical literature on the effect of selection and retention on outcomes. Partisan elections are associated with higher tort awards, decisions against out of state businesses, a higher likelihood of siding with state agencies in challenges to regulations, a lower likelihood of enforcing constitutional restrictions on deficit financing and more punitive sentencing outcomes.[15] Elections are also associated with judges adopting positions on death penalty cases that may be contrary to their preferences.[16]

We use panel methods to describe the relationship between initial conditions and judicial retention. We focus on the evolution of partisan retention elections and all retention elections, both partisan and non-partisan, during 1912-2000. We start in 1912 because the last two states in the continental United States – Arizona and New Mexico – were admitted in this year. 1912 is an opportune starting date from an historical

---

[14] Hanssen (2002).

[15] See Tabarrok and Helland (1999), Hanssen (1999), Bohn and Inman (1996), Huber and Gordon (2004). One question that arises is whether the differential behavior of judges selected and retained by partisan elections and by other mechanisms reflects selection or incentives. The available evidence suggests that incentives are the dominant factor. That is, the judges selected are similar, but they behave differently once on the bench. Canon (1972), Glick and Emmert (1987), and Besley and Payne (2003) address this issue. Hall (1984) provides evidence that northern and southern judges have similar educational and family backgrounds. Choi, Gulati and Posner (2007), however, argue that while appointed high level state courts judges in the United States write higher quality opinions than elected judges, the elected judges write many more opinions. Still they argue that elections encourage state judges to behave more like politicians who are focused on providing service to their constituents, while appointments encourage judges to behave more like professionals who are focused on building a legacy as creators of law.

[16] Hall (1987, 1992).

perspective as well. Many parties had come to believe that partisan elections detracted from judicial independence. And so around this time states began to change their methods of retaining judges.

States that eliminated partisan elections or non-partisan elections typically only did so once during the twentieth century. Reform was costly and therefore rare, because it typically required amending or even replacing a constitution. These changes entailed a great deal of coordination among the legislature, the executive branch and public interest groups.[17] Because these procedures evolved slowly, we average the share of years during 1912-1920, and then for each subsequent decade (1921-1930, 1931-1940… 1991-2000) for which a particular state had no partisan elections and no elections.

Columns (1) and (2) of Table 5.7 summarize the share of state-years in which there were no partisan elections and no elections during 1912-1920, and then on a decadal basis through 2000. In 1912, 17 states (35 percent) did not use partisan elections to retain judges and 11 states (23 percent) did not use any form of elections to retain judges. During the years 1912 to 1920, there were no partisan elections in 41 percent of the state-years and no elections in 21 percent of the state-years. The trend away from partisan and non-partisan elections proceeded gradually, but steadily. By 1991-2000 there were no partisan elections in 88 percent of the state-years and no elections in 60 percent of the state-years.

---

[17] One exception is Tennessee which eliminated partisan retention elections in 1952, reinstated them in 1966 and eliminated them again in 1995. Also, many states simply replaced partisan elections with elections.

[17] In the appendix we report the results from ordered probit regressions. In general the two models give very similar results

Table 5.7 here.

A key question is: How have initial conditions influenced the elimination of partisan elections and all elections during 1912-2000? Let REF_{id} denote the share of years during a decade when there are "no partisan elections" or "no elections" in state i in decade d. We estimate the following linear probability model:

$$REF_{id} = \alpha_0 + \alpha_1 CLIM_i + \alpha_2 CLIM_i * t_1 + \alpha_3 CLIM_i * t_2 + \alpha_4 CIV_i + \alpha_5 CIV_i * t_1$$
$$+ \alpha_6 CIV_i * t_2 + \alpha_7 TRANS_i + \alpha_8 TRANS_i * t_1 + \alpha_9 TRANS_i * t_2 + \alpha_{10} CULT_i \qquad (1)$$
$$+ \alpha_{11} CULT_i * t_1 + \alpha_{12} CULT_i * t_2 + \beta_t decade_d + u_{it}$$

The model in equation (1) extends the "time trend" model with structural breaks introduced in Chapter 3, where $CLIM_i$, CIV_i, $TRANS_i$ and $CULT_i$ are climate, civil law, access to water transportation, and culture in state i; $decade_d$ is a decadal dummy variable; and u_{it} is a state specific error term. All standard errors are robust and are clustered at the state-level. In Chapter 3 we argued that we should allow the time trend for initial conditions to vary, with break points at 1896 and 1960. Since 1912-1920 is the initial decade, the time interaction term t_1 corresponds to the decades encompassed by 1912-1960. And, the time interaction term t_2 corresponds to the decades encompassed by 1961-2000. For ease of interpretation, climate, transportation and culture are standardized to have a mean of 0 and a variance of 1. In some specifications, we also control for logged population at the beginning of each decade.

Table 5.8 contains estimates of the linear probability model for "no partisan elections" and "no elections." In each pair of columns, we first estimate the specification

with the three initial conditions – climate, transportation, and civil – and then estimate the specification with the initial conditions and population.[18]

Table 5.8 here.

Because the effects of initial conditions are permitted to vary over time, we plot their effects on the use of partisan elections and all elections over time in Figures 5.2-5.4. Figure 5.2 shows that states with warmer, wetter climates were more likely to use partisan retention elections than states with wetter, cooler climates in every decade. The initial difference was relatively small, but it grew through the 1950s and diminished in subsequent decades. Interestingly, the overall effect of climate on no elections is positive, although the effects in specific periods are generally small.

Figure 5.2 here.

Figure 5.3 shows that in 1912-1920civil-law states were much more likely to have elections and partisan elections than common-law states.[19] Civil-law states converged towards common-law states in their use of elections up to 1950. From 1950 to 2000, civil-law states diverged slightly from common-law states, because common-law states got rid of elections somewhat more rapidly.

---

[18] Because climate and culture are fairly highly correlated and the number of observations – while sizeable – is not huge, we only include climate.

[19] Although the magnitudes of the effects are substantial, the differences are only statistically significant for no elections in 1912-1920. In the ordered probit model reported in the appendix, civil law has a statistically significant negative influence on the removal of elections at the end of the twentieth century. The statistical significance of civil is the only point on which the two models are different.

Figure 5.3 here.

Figure 5.4 shows that states with greater access to water transportation were substantially less likely to have partisan and non-partisan elections than states with more limited access to water transportation. The effect was fairly constant over time.

Figure 5.4 here.

Finally, the association between logged population and removal of both partisan elections and elections in Table 5.8 is negative and statistically significant. One interpretation of this is that changing the method of retaining judges is a complicated process that requires coordination between the different government branches and the public at large. For example, it can involve amending or rewriting the state constitution. Thus, we would expect larger states would be slower to change these procedures.

In sum, Table 5.8 and the accompanying figures show that initial conditions influenced state judicial retention procedures in 1912-1920 and the evolution of these procedures over time.

Judicial Terms

Judges will have greater independence the longer their tenure, because they face elections or other reappointment procedures less often. The term length that court of last resort judges have before they must stand for either re-election or re-appointment varies

from two years to twenty one years. Moreover, in Massachusetts, New Hampshire and Rhode Island, court of last resort judges, once appointed, are tenured.[20] As we argued previously, judicial terms are an indicator of judicial independence.[21] Moreover, judicial terms, like retention procedures, are slow-moving, because it requires coordination among the different state government branches and even changes to state constitutions.

Data on judicial terms for state court of last resort judges is available from the Book of the States starting in 1937. We use this data starting in 1943 when it covers all 48 continental states. These rules change very slowly. For example, of the three states that grant judges tenure, only Massachusetts made a change, which was to require that judges step down at age 70. Of the 45 states that do not grant tenure, only 11 changed the length of judicial terms between 1943 and 2000. Seven states – Illinois, Indiana, Iowa, Missouri, Montana, South Dakota and Vermont – increased term length. Three states – Louisiana, Maryland, and Pennsylvania – decreased term length. And one state – Michigan – decreased term length during the 1960s and later reinstated the original term length of eight years.

Because there is so little time series variation in term lengths, we check for the influence of initial conditions at the beginning (1943) and end (2000) of our time series. Columns (1) and (3) in Table 5.9 reports the results for the group of 45 states that do not grant tenure. In columns (2) and (4) we also include the three states that grant tenure under the assumption that tenured judges spend thirty-three years on the bench.[22] Transportation is statistically significant in three of the four specifications, but the

---

[20] They either must step down at age seventy or can serve for life.
[21] Choi, Gulati and Posner (2007) argue that while length of term increases independence, it does not necessarily increase judicial quality.
[22] We assume that high court judges are on average appointed in their late 30s or early 40s. The results are not sensitive to this assumption.

magnitude of the effect in years is relatively small. A one-standard-deviation increase in transportation leads to judicial terms that are 1.03-2.92 years longer. None of the other initial conditions are statistically significant. The low R-squareds suggest that initial conditions, including transportation, are only weakly related to judicial terms.[23] And as we saw in Table 5.5, although judicial terms are in principle important, in practice they are only weakly related to the quality of state courts.

Table 5.9 here

Judicial Budgets

Data on budgets for state courts are available starting in 1953 from the Census of Governments. [24] Unfortunately, up to 1961 the data are available only intermittently. Further, during this period, there are questions about the consistency of the data and its comparability over time. Thus, we only use data for the period 1961-2000. The budget variable includes expenditures on all state criminal and civil courts. These expenditures include salaries for judges and court reporters, payments for witness fees, and payments to legal departments, general counsels, solicitors, and prosecuting and district attorneys. In 1982, this variable began to include payments for legal services and public defense as well.

We deflate judicial and legal expenditures using 2000 as the base year and divide by state population in a given year. For brevity, deflated judicial and legal expenditures per capita are denoted judicial budgets. Between 1961 and 2000, judicial budgets

---

[23] In unreported regressions, similar results are obtained if culture is excluded.
[24] U.S. Census Bureau (2001).

increased in the average state from \$3.53 to \$48.31. This increase represents an annual average growth rate of almost 7 percent. The dispersion in spending across states has been relatively stable. In 1961 spending on courts in the top ranked state (Vermont at \$13.28) was 14.8 times greater than in the lowest ranked state (Michigan at \$0.90). In 2000 spending in the top ranked state (Connecticut at \$116.69) was roughly 13.7 times greater than in the lowest rank state (Washington at \$3.53). There has been some change in the rank of state spending – the correlation coefficient for the rank of judicial and legal spending in 1961 and 2000 is 0.51.

We also the compute the relative judicial budget, which is the state judicial budget divided by the state legislative budget. Relative judicial budgets are indicative of the balance of power between the legislature and the judiciary, with larger relative budgets implying a relatively more powerful, and very likely more independent, judiciary. The average relative judicial budget grew from 2.2 in 1961 to 6.4 in 2000.

We examine the relationship between initial conditions and judicial budgets by adapting the model in equation (1). Because judicial budgets exhibit substantial variation over time, we use the annual data and include year fixed effects. In equation (1) we allowed the effects of initial conditions to be different in the periods 1912-1960 and 1961-2000. Because the budget data that we use falls exclusively in this second period, we drop the time-interacted effects of initial conditions.[25] We also control for whether a state has an intermediate appellate court, since they require substantial budgetary support.

---

[25] In unreported regressions, we find that when we control for time-interacted effects and a full set of year fixed effects, the time-interacted effects are jointly statistically insignificant for both judicial budgets and relative judicial budgets. This suggests that time-interacted effects of initial conditions are not important during 1961-2000.

We report our results in Table 5.10. In columns (1) and (3), we regress budgets and relative budgets on initial conditions. In columns (2) and (4), we add controls for population and for whether the state has an intermediate appellate court. Although the coefficient on civil is not statistically significant in the budget regressions, it is negative and statistically significant in the relative judicial budget regressions. Thus, civil-law states spent the same amount per capita as common-law states did.[26] As a share of the legislative budget, however, civil-law states spent much less than common-law states. Civil law is associated with a 1.23 point drop in the relative judicial budget, which is approximately the difference between average levels in the civil-law state of Florida (2.0) and the common-law state of Idaho (3.3). This evidence from relative budgets is consistent with the judiciary being more subordinate to the legislature in civil-law states than in common-law states.

The effect of access to water transportation is positive, statistically significant and large. In the case of judicial budgets, a one standard deviation increase in access to water transportation is associated with roughly a 30 percent increase in the judicial budget and a 0.60 increase in the relative judicial budget. The first can be thought of as the difference between Nevada, which is landlocked, and Tennessee, which has much better access to water transportation. The second can be thought of as the difference between the Nevada and Pennsylvania, which has substantially better access to water transportation.

Intermediate appellate courts and population also have significant effects on budgets. The effect of intermediate appellate courts on state judicial budgets is strongly positive and statistically significant in all four columns. The effect of population is

---

[26] If we do not control for the other initial conditions, then civil law states on average have lower budgets and relative budgets after controlling for national time effects.

substantial and negative in all four columns, and the effect is statistically significant in three of the four columns. There are a number of possible explanations for the negative influence of population. One is that there are economies of scale in court systems. Another is that bigger states have more agencies competing for scarce dollars. A third is that the strong negative effect is partly the result of the fact that population and intermediate appellate courts are positively correlated. We will discuss this last point further in the next section.

Intermediate Appellate Courts

Intermediate appellate courts now exist in many states to help the state supreme courts handle appeals from trial courts. This enables courts of last resort to have greater control over their dockets. The control is not complete, because state supreme courts in some locations have mandatory jurisdiction over a variety of types of cases, including, for example, death penalty appeals. Nevertheless, having greater control over their docket allows the state supreme courts to devote more attention to fewer cases.

Similar to the elimination of retention elections, the introduction of intermediate appellate courts required substantial coordination among the different branches of government. This was true, because change required either an executive order or an amendment to the state constitution.[27] Thus, reform moved slowly and without reversal. In 1909, only nine states had intermediate appellate courts. As late as 1956, only three more states had intermediate appellate courts. Reform accelerated in the 1960s, and by 2000, intermediate appellate courts were operating in 37 of the 48 states.

---

[27] See Chapp and Hanson (1990).

As Kagan et al. (1978) noted, rapid growth in state population was associated with growth in the caseload in state supreme courts. Supreme courts in states that established intermediate appellate courts were subsequently successful in controlling their caseload. For example, New Jersey established an intermediate appellate court in 1844. The intermediate appellate court may have been one reason why the New Jersey Supreme Court could keep a low caseload during 1900 and 1935, a period when population increased by 222 percent. Similarly, one explanation for why the Tennessee Supreme Court had low caseload throughout the twentieth century is that it set up an intermediate appellate court for equity cases in 1895 and for civil cases in 1907, and then expanded the intermediate appellate court for civil appeals in 1925.[28]

In Table 5.11, we estimate the same linear probability model that we estimated for judicial retention procedures. Consistent with Kagan et al (1978) we find that population is has a strong and statistically significant positive association with intermediate appellate courts. The regressions show that during the twentieth century climate and transportation have had small and statistically insignificant effects on the adoption of intermediate appellate courts.

Table 5.11 and Figure 5.5 here

Somewhat surprisingly, the effect of civil law on the adoption of intermediate appellate courts is large, positive and statistically significant throughout the period. The effect is illustrated in Figure 5.5. One interpretation of the positive influence of civil law on the adoption of intermediate appellate courts is that legislatures and members of the

---

[28] See Kagan et al. (1978), pp.973-974

executive branch in civil-law states prefer intermediate appellate courts for reasons having to do with control. The issue of control is likely to arise if the number of important cases is large enough that they cannot all be heard by the state high court. At this juncture, the state legislature has two options. It can let these important cases be heard and decided by trial courts, or it can create intermediate appellate courts. The latter choice may be more attractive if control is important, because there are typically only a small number of intermediate appellate courts. In many states, there is only one. In contrast, trial courts are large in number and are geographically distributed. These factors make monitoring trial courts' activities and possibly punishing errant judges much more difficult.

Lawyers and Judges

We have not yet discussed a key input into the legal system, namely, lawyers and judges. The Census of Population recorded the primary occupation of all adults from 1850 onward. Thus, we can track lawyers and judges (jointly) as a percentage of the population for the period 1850-2000.[29] The percentage of lawyers and judges sheds light on a number of issues including: the attractiveness of law as a profession; the depth of the pool from which judges were selected; the relative demand for lawyers across states at a given point in time and the evolution of relative demand over time.

In Figure 5.6, we plot the number of lawyers per 100,000 in the United States by decade. From 1850 to 1970, the average number of lawyers fluctuated between 108 per 100,000 and 155 per 100,000. The relatively limited variation in the number of lawyers

---

[29] To make these calculations, we computed the number of lawyers and judges (of all genders and races) from the published census volumes for 1850-1930. From 1940 on, we used the 1-100 public use samples of the Censuses of Population to estimate the number of lawyers and judges.

per capita from 1850 to 1970 is striking, because this was a period of extraordinary change. One dimension of this change was that the United States became much more heavily urban, something that is often considered to be a predictor of litigation and the need for lawyers. The number of lawyers then rose extremely rapidly from 1970 to 2000.

In Table 5.12, we examine the relationship between three state initial conditions – climate, transportation, and civil law – and the natural log of the number of lawyers per capita from 1870 to 2000. We control for population, to capture any scale related issues, such as smaller states requiring proportionately more or fewer lawyers. The specification in column (1) restricts the effects of the initial conditions to be constant over the whole period, but includes decade-specific fixed effects. Climate had a statistically significant negative effect on the number of lawyers per capita. A one standard deviation increase in climate decreased the number of lawyers by 20 percent. Transportation had a statistically significant positive effect on the number of lawyers per capita. A one standard deviation increase in access to water transportation increased the number of lawyers by 9 percent. Both civil law and population had positive, but statistically insignificant effects. The fit is good, considering the parsimony of the model.

In column (2), we estimate the time-trend model with the usual breaks at 1896 (1900, because we are using decadal observations) and 1960. Figure 5.7 plots the marginal effects of climate, transportation, and civil law on the number of logged lawyers per capita. The effect of climate was always negative and large. It was falling from 1870 to 1900 and rising thereafter, although it remained negative throughout. The effect of greater access to water transportation was initially negative and fell slightly from 1870 to 1900. After 1900, the effect was rising and it became positive after 1940. By 2000, the

effect of increased access to water transportation was strongly positive. The effect of civil law was the reverse of access to water transportation. It was initially positive and rose slightly between 1870 and 1900. The positive effect of having been a civil law state on lawyers per 100,000 may have been driven in part by lawyers' tendency to flock to the frontier as new states and territories were formed. Many of these lawyers sought to establish themselves as judges, legislators, governors, and other state officials.

The effect of civil law on the number of lawyers per 100,000 was falling after 1900, negative after 1950, and strongly negative in 2000. The decline in the number of lawyers per capita in civil law states after 1900 may be related to the fact that civil law states were slow to move away from partisan elections. Recall that judges retained under partisan elections are more predictable in their decision making than, for example, judges who are appointed. Thus, relatively fewer cases are filed under partisan elections than under appointment-based systems, which may have an effect on the demand for lawyers.

The effects of initial conditions on lawyers and judges per capita at the end of the twentieth century are consistent with what we found for the quality of state courts. States with warmer, wetter climates had fewer lawyers and judges in 2000 and lower quality courts in 2002-2007. States with greater access to water transport had more lawyers and judges and (insignificantly) higher quality courts. Civil law states had fewer lawyers and judges and lower quality courts. The relative magnitude is notable in 2000. A state with a one standard deviation higher climate had 26 fewer lawyers per capita and a state with civil law had 63 fewer lawyers per capita. These relative magnitudes are consistent with the relative magnitudes for climate and civil – -0.336 and -0.886 – in the quality of courts regressions.

Because lawyers and judges per capita is a crude and indirect measure of the functioning of the state legal system, one wants to be somewhat cautious in making inferences. The patterns that we find for the evolution of lawyers and judges per capita, however, are consistent with the patterns that we found regarding the evolution of judicial selection systems and the evolution of state budgets. In addition to having fewer lawyers and judges per capita, states with warmer wetter climates were slower to move away from partisan elections. States with great access to water transport had more lawyers and judges per capita, were more likely to have moved away from partisan elections, and had greater absolute and relative judicial budgets. Civil law states had larger numbers of lawyers and judges per capita initially, but beginning in 1900 this fell over time and became negative by 1950. At the same time, these states were slower to move away from partisan elections and had lower absolute and particularly relative budgets.

Conclusion

We began by showing the relationship between state initial conditions and the quality of state courts in 2002-2007. Both climate and civil law had negative, large, and statistically significant effects on the quality of state courts. In contrast, access to water transportation had a positive, small, and statistically insignificant effect on state courts. The question is why and how conditions at the time of a state's settlement would affect the quality of state courts.

To address this, we examined the relationship between contemporary variables and the quality of state courts, including judicial retention procedures, budgets, competition in the state legislature as measured by the Ranney index, and whether a state

had an intermediate appellate court. Of the contemporary variables, the three that had statistically significant relationships with the quality of state courts were whether the state had partisan elections or not, the size of the state judicial budget relative to the legislative budget, and the Ranney index. The effects of all three were positive – states that did not use partisan elections to retain their judges, states with larger relative judicial budgets, and states with greater competition in the state legislature all had higher quality state courts. For judicial selection and the Ranney index, we have data over very long periods of time that allow us to begin to examine why and how initial conditions have affected these inputs into the judicial system. For judicial budgets, we have data over a shorter period of time – forty years at the end of the twentieth century. So our ability to address these issues will be more limited.

For partisan elections, we showed that climate, access to water transportation, and civil law all had substantial and persistent effects on the use of partisan elections. States with warmer and wetter climates were more likely to use partisan elections, as were states with civil-law origins. As we discussed earlier, the effect of climate on partisan elections is likely to have been a product of two related factors. States with warmer wetter climates had lower competition in the state legislature and a more homogeneous elite that likely preferred less independent (and more pro-elite) judges. The civil-law effect on partisan elections, while at times substantial, was not statistically significant in the second half of the twentieth century and was only marginally statistically significant during the first half of the twentieth century. The civil law effect was stronger for all elections. States with greater access to water transportation were less likely to use partisan elections. This likely to have been a result of a number of forces, including greater

competition in the state legislature, a more diverse elite that preferred more independent judges, and competition with other states for trade through the provision of more impartial courts.

As we discussed in detail in Chapter 3, the evolution of the state Ranney index was strongly related to state initial conditions. The effect of climate on the Ranney index was persistently negative and statistically significant, while the effect of transportation on the Ranney index was persistently positive and statistically significant. The effect of civil-law origins was persistently positive, but typically not statistically significant.

Although we observed relative budgets over a much shorter period of time, the fact that the effect of civil-law origins was negative, although statistically insignificant, is of interest. In principle, civil law views the judiciary as subordinate to the legislature. Consistent with this, we found that civil-law states had smaller budgets in absolute terms and much smaller budgets in relative terms. One implication is that legislative budgets in civil-law states were bigger than legislative budgets in common-law states. The effect of access to water transportation on judicial budgets was positive and statistically significant. This is likely to be driven by the same forces that led these states not to use partisan elections. The effect of climate on judicial budgets was negative but not statistically significant. This too was likely to be driven by the same forces that led these states to use partisan elections.

Finally, we found that number of lawyers and judges is also systematically related to initial conditions. States with warmer and wetter climates had fewer lawyers and judges, as did civil law states. This may be yet another reason why these states had lower quality state courts in 2002-2007.

Daniel Berkowitz and Karen B. Clay, Initial Conditions and the Evolution of Institutions (Book Project), May 2008 - Continued

Chapter 5: State Courts and Initial Conditions- Continued

Table 5.1: Quality of Courts Surveys – Respondents

Year of Survey	Respondents	States evaluated by the average respondent	Respondents' years of legal experience
2002	824	5	21
2003	928	5	22
2004	1,402	5	20
2005	1,437	5	19
2006	1,456	6	NA
2007	1,599	3	22

Notes: *State Liability Systems Ranking Study,* various years.

Table 5.2: Correlations among Measures of Quality of State Courts

Correlations with the Quality of State Courts 2002-2007			
Government Corruption, 1992-2001	-0.47	Legal Professionalism, prior to 1973 (ranked in ascending order)	0.28
Corruption, 1982-1991	-0.40	Judicial Removal, 1990-2001	-0.22
Corruption based on surveys of State reporters, 1999	-0.40	Political attitude of supreme court judges, 1960-93 (increasing in liberalism)	-0.22
Judicial Activism, 1981-85	-0.32	Citation of Supreme Court, 1975 (ranked in ascending order)	0.10

Notes: Corruption, 1992-2001, is average federal public corruption convictions per 100,000 for 1992-2001 and 1982-1991 (Public Integrity Section, selected years). Corruption as perceived by state legislative reporters in 1999 is based on a survey of State House reporters (Boylan and Long, 2003). Judicial removal is the total number of judges removed, including those who step down by agreement or an order, between January 1990 and December 2001 per 1,000,000 in population (Gray 2002). Judicial activism is based on the 3,024 constitutional challenges in both civil and criminal cases to state legislation in state supreme courts during 1981-85 compiled by Beavers and Emmert (1985). Judicial activism is measured as the share of these cases in which state court of last resort ruled that state legislation was, at least to some degree, unconstitutional. The index of legal professionalism is a composite score including five major factors of state courts systems. The factors include (1) method of selection for judges in all courts -- states were scored for approximation to ABA model plan of selection; (2) state court organization and the approximation to the ABA model court structure; (3) judicial administration in the states -- states were scored for presence of professional administrator and size and nature of his staff; (4) tenure of office for judges of major trial and appellate courts and approximation to ABA recommendations; (4) level of basic salary for judges of major trial and appellate courts exclusive of fees and local payments. Each factor involved scoring the state on a five-point scale according to how closely judicial features in the state approached the ABA model and each was measured prior to 1973 (Glick and Vines 1973). Reputation of a state supreme court in 1975 is based upon the number of citation of other supreme courts in 1975 (Caldeira 1983). Political Attitude of Supreme Courts Judges, 1960-93, is a measure of the ideology of these judges serving during this period based on elite ideology for appointed judges and citizen ideology for elected judges and that also includes the influence of partisan affiliation of these judges. The measure ranges from a minimum of most conservative to a maximum of most liberal and is computed for 900 judges at the time of appointment or election. We report the ideology of the median judge in each state. (Brace, Langer, and Hall 2000). The numbers used have been updated and are available at
http://www.u.arizona.edu/~llanger/replication_datasets.htm.

Table 5.3: Initial Conditions and the Quality of State Courts

Dependent Variable	Standardized Quality of State Courts in 2002-2007			
Column	(1)	(2)	(3)	(4)
Climate	-0.176	-0.363***		-0.549***
	(0.31)	(0.12)		(0.154)
Culture	-0.210		-0.336**	
	(0.29)		(0.13)	
Civil	-0.833***	-0.843***	-0.886**	-1.04***
	(0.30)	(0.29)	(0.34)	(0.310)
Transport	0.072	0.130	0.013	-0.009
	(0.15)	(0.11)	(0.11)	(0.107)
Observations	48	48	48	28
R-squared	0.39	0.37	0.38	0.65

Notes: Standard errors are in parentheses and are robust. The notation *, **, and *** denotes statistical significance at the 10-percent, 5-percent, and 1-percent levels. The constant is estimated but not reported. The p-value for the F-test for the joint exclusion of climate and culture is 0.019. Climate, transportation, and the quality of state courts are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on the quality of state courts, as measured in standard deviations . Civil law is a dummy variable that measures the influence of civil relative to common-law origins.

Table 5.4: Civil Law, Mechanism Variables, and the Quality of State Courts

Dependent Variable	Standardized Quality of State Courts in 2002-2007			
Column	(1)	(2)	(3)	(4)
Civil	-1.25***	-1.42***	-1.34***	-0.779**
	(0.33)	(0.353)	(0.392)	(0.323)
HHI elite	-0.318**			
	(0.137)			
HHI Median		-0.231**		
		(0.097)		
Elite Share of Wealth			-0.204	
			(0.168)	
Soldier Mortality				-0.385***
				(0.135)
Observations	28	28	28	28
R-squared	0.55	0.50	0.50	0.40

Notes: Standard errors are in parentheses and are robust. The notation *, **, and *** denotes statistical significance at the 10-percent, 5-percent, and 1-percent levels. The constant is estimated but not reported. The quality of state courts is standardized to have a mean of 0 and a standard deviation of 1. Civil law is a dummy variable that measures the influence of civil relative to common-law origins.

Table 5.5: Contemporary Variables and the Quality of State Courts

	Mean (Standard deviation)	Correlation with Court Quality
Column	(1)	(2)
Ranney Index	63.96 (24.73)	0.60
No Partisan Elections	0.804 (0.378)	0.58
No Elections	0.530 (0.479)	0.34
Judicial Budget per capita	16.29 (9.95)	0.33
Relative Judicial Budget	3.02 (1.88)	0.24
Judicial Activism, 1981-1985	8.94 (25.04)	-0.18
Judicial Removal	0.595 (0.906)	-0.22
Intermediate Appellate Courts	0.614 (0.432)	-0.09
Judicial Term	8.34 (2.31)	-0.07

Notes: All of the variables are averaged over the period 1970-1990. When making calculations for judicial term length, we drop the three states where judges are tenured.

Table 5.6: Determinants of the Quality of State Courts

Dependent Variable	Standardized Quality of State Courts in 2002-2007			
Column	(1)	(2)	(3)	(4)
Ranney Index	0.397*** (0.135)	0.406*** (0.128)	0.329** (0.145)	0.329** (0.138)
No partisan elections	0.320* (0.167)	0.417*** (0.145)	0.412*** (0.148)	0.465*** (0.123)
No elections	0.0579 (0.102)			
Judicial Budget per capita		-0.0404 (0.137)		
Relative Judicial Budget		0.379*** (0.129)	0.267** (0.0991)	0.279*** (0.100)
Judicial Activism, 1981-1985			-0.272** (0.114)	-0.237** (0.106)
Judicial Removal			-0.150 (0.110)	
Intermediate Appellate Courts			-0.114 (0.108)	
Judicial Term			0.0279 (0.0592)	
Observations	47	47	47	47
R-squared	0.445	0.566	0.641	0.613

Notes: Standard errors are in parentheses and are robust. The notation *, **, and *** denotes statistical significance at the 10-percent, 5-percent, and 1-percent levels. The constant is estimated but not reported. We have 47 observations, because Nebraska is unicameral and thus we cannot compute a Ranney index for it. All variables have been standardized to have a mean of 0 and a standard deviation of 1.

Table 5.7: Judicial Retention

	No Partisan Elections	No Elections
Column	(1)	(2)
1912-1920	0.412	0.213
1921-1930	0.438	0.208
1931-1940	0.483	0.225
1941-1950	0.538	0.25
1951-1960	0.602	0.275
1961-1970	0.669	0.356
1971-1980	0.783	0.504
1981-1990	0.831	0.567
1991-2000	0.881	0.596

Notes: *The Book of States*, various years.

Table 5.8: Initial Conditions and Judicial Retention 1912-2000

Dependent Variable	No Partisan Elections	No Partisan Elections	No Elections	No Elections
Column	(1)	(2)	(3)	(4)
Climate	-0.126	-0.097	0.056	0.080
	(0.084)	(0.083)	(0.060)	(0.060)
Climate*t_1	-0.034**	-0.036**	-0.009	-0.011
	(0.016)	(0.16)	(0.011)	(0.011)
Climate*t_2	0.024**	0.024**	-0.006	-0.066
	(0.011)	(0.011)	(0.009)	(0.009)
Civil	-0.281	-0.269	-0.365***	-0.355***
	(0.185)	(0.177)	(0.112)	(0.108)
Civil*t_1	0.034	0.042	0.047	0.054
	(0.034)	(0.033)	(0.034)	(0.034)
Civil*t_2	-0.008	-0.009	-0.007	-0.008
	(0.026)	(0.026)	(0.028)	(0.014)
Transportation	0.120	0.142**	0.162**	0.180***
	(0.074)	(0.066)	(0.064)	(0.060)
Transportation*t_1	0.005	0.007	0.004	0.006
	(0.012)	(0.012)	(0.006)	(0.006)
Transportation*t_2	-0.008	-0.009	-0.014	-0.014
	(0.008)	(0.009)	(0.008)	(0.008)
Logged population	X	-0.102**	X	-0.082*
		(0.044)		(0.048)
Observations	432	432	432	432
R-squared	0.36	0.39	0.24	0.26

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level. The notation ***, ** and * denotes significance at the 1 percent, 5 percent and 10 percent levels. Controls for national decadal time effects and a constant are estimated but not reported. Climate and transportation are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on the share of years in which there are no partisan election and no elections. Civil law is a dummy variable that measures the influence of civil relative to common-law origins.

Table 5.9: Initial Conditions and Judicial Terms

Dependent Variable	Judicial Term Length			
Date of Judicial Term Length	1943	1943	2000	2000
Column	(1)	(2)	(3)	(4)
Climate	0.117 (0.460)	-0.520 (0.699)	-0.177 (0.335)	-0.839 (0.621)
Civil	-0.515 (0.892)	-2.04 (1.43)	0.264 (0.777)	-1.30 (1.37)
Transportation	1.03** (0.494)	2.92** (1.25)	0.649 (0.389)	2.60** (1.25)
Observations	45	48	45	48
States with Tenure	No	Yes	No	Yes
R-squared	0.104	0.190	0.073	0.160

Notes: Standard errors are in parentheses and are robust. Length of terms in states where tenure is granted is set at 33 under the assumption that high court judges will come on the bench in their late 30s or early 40s. The results with tenured states in columns (2) and (4) do not change appreciably when we vary the length of term. The notation ***, ** and * denotes significance at the 1 percent, 5 percent and 10 percent levels. Climate and transportation are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on judicial term. Civil law is a dummy variable that measures the influence of civil relative to common law origins.

Table 5.10: Initial Conditions and Judicial Budgets during 1961-2000

Dependent Variable	Logged Real Judicial Budget per Capita (2000=100)		Relative Judicial Budget (Judicial/Legislative)	
Column	(1)	(2)	(3)	(4)
Climate	-0.130	-0.109	0.171	0.155
	(0.084)	(0.076)	(0.393)	(0.375)
Civil	-0.286	-0.166	-1.13	-1.20
	(0.191)	(0.174)	(0.698)	(0.765)
Transportation	0.234***	0.320***	0.385	0.478
	(0.081)	(0.062)	(0.303)	(0.312)
Intermediate Appellate Courts	X	0.259*	X	1.13*
		(0.130)		(0.564)
Logged population	X	-0.315***	X	-0.479*
		(0.082)		(0.275)
Observations	1920	1920	1920	1920
R-squared	0.746	0.788	0.264	0.280

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level. The notation ***, ** and * denotes significance at the 1 percent, 5 percent and 10 percent levels. Controls for annual time effects and a constant are estimated but not reported. Climate and transportation are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on budgets. Civil law is a dummy variable that measures the influence of civil relative to common law origins.

Table 5.11: Initial Conditions and Intermediate Appellate Courts

Dependent Variable	Operating Intermediate Appellate Courts	
Column	(1)	(2)
Climate	0.096	0.030
	(0.085)	(0.084)
Climate*t_1	0.004	0.010
	(0.004)	(0.005)
Climate*t_2	-0.009	-0.009
	(0.010)	(0.010)
Civil	0.372**	0.344**
	(0.179)	(0.150)
Civil*t_1	-0.019*	-0.038***
	(0.009)	(0.012)
Civil*t_2	0.011	0.012
	(0.024)	(0.024)
Transportation	-0.007	-0.057
	(0.062)	(0.056)
Transportation*t_1	0.007	0.002
	(0.008)	(0.008)
Transportation*t_2	0.001	0.002
	(0.009)	(0.009)
Logged population	X	0.231***
		(0.038)
Observations	432	432
R-squared	0.38	0.56

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level. The notation ***, ** and * denotes significance at the 1 percent, 5 percent and 10 percent levels. Controls for national decadal time effects and a constant are estimated but not reported. Climate and transportation are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on the share of years when there are operating intermediate appellate courts. Civil law is a dummy variable that measures the influence of civil relative to common law origins.

Table 5.12: Initial Conditions and Lawyers and Judges
1870-2000

Dependent Variable	Logged Lawyers per 100,000	
Column	(1)	(2)
Climate	-0.199***	-0.248***
	(0.046)	(0.047)
Climate*t_1		-0.005**
		(0.002)
Climate*t_2		0.001*
		(0.001)
Climate*t_3		0.006***
		(0.001)
Civil	0.094	0.206**
	(0.094)	(0.094)
Civil*t_1		0.002
		(0.003)
Civil*t_2		-0.005***
		(0.002)
Civil*t_3		-0.008***
		(0.002)
Transportation	0.088**	0.031
	(0.040)	(0.043)
Transportation*t_1		-0.004**
		(0.002)
Transportation*t_2		0.003***
		(0.001)
Transportation*t_3		0.004***
		(0.001)
Logged population	0.039	0.048
	(0.038)	(0.038)
Observations	651	651
R-squared	0.523	0.577

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level. The notation ***, ** and * denotes significance at the 1 percent, 5 percent and 10 percent levels. Controls for national decadal time effects and a constant are estimated but not reported. Climate and transportation are standardized to have a mean of 0 and a standard deviation of 1. Thus, the point estimates for climate and transportation estimate "quantitative significance", i.e. the influence of a one-standard deviation increase in this initial condition on the share of years when there are operating intermediate appellate courts. Civil law is a dummy variable that measures the influence of civil relative to common law origins. Because we are using decadal data during 1870-2000, the time interaction variables t_1, t_2 and t_3 correspond to 1870-1900. 1900-1960 and 1960-2000.
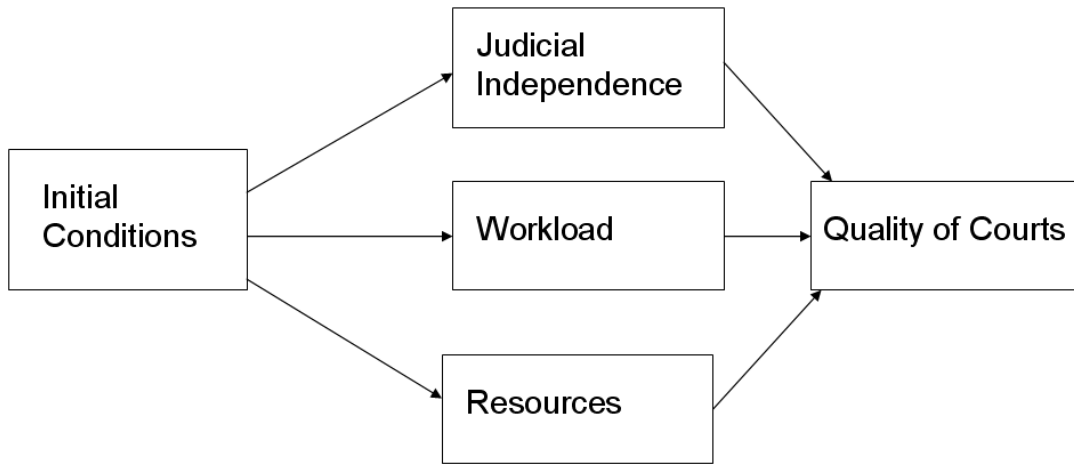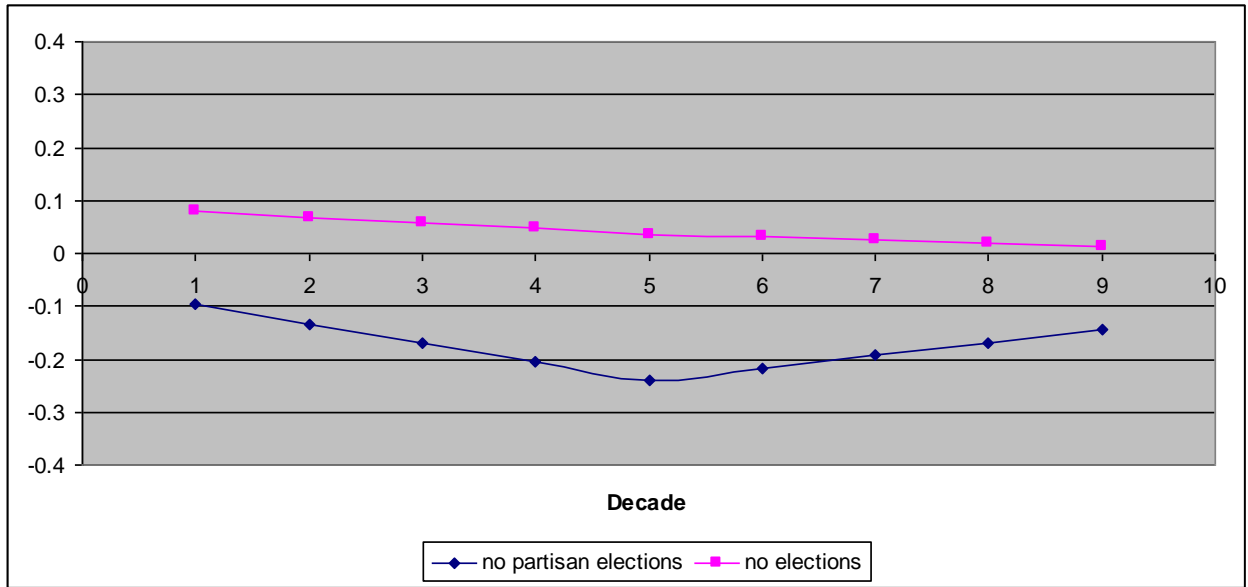
Figure 5.1

Initial Conditions → Judicial Independence → Quality of Courts

Initial Conditions → Workload → Quality of Courts

Initial Conditions → Resources → Quality of Courts

Figure 5.2: Influence of Climate on Retention

Influence of Climate-Selected Decades

Years	Decade	No Partisan Elections	No Elections
1912-1920	1	-0.097 (0.083)	0.080 (0.060)
1951-1960	5	-0.241*** (0.064)	0.037 (0.074)
1991-2000	9	-0.144** (0.057)	0.013 (0.069)

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level.

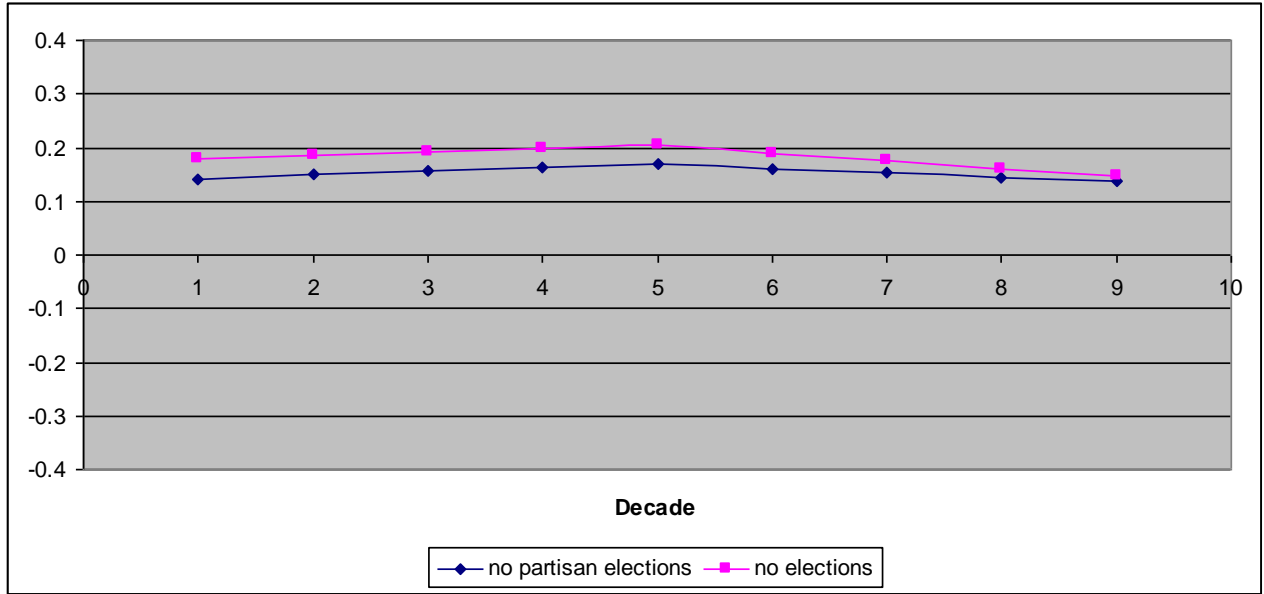Figure 5.3: Influence of Civil Law on Retention

Influence of Civil Law - Selected Decades

Years	Decade	No Partisan Elections	No Elections
1912-1920	1	-0.269 (0.177)	-0.355*** (0.108)
1951-1960	5	-0.100 (0.159)	-0.138 (0.169)
1991-2000	9	-0.136 (0.127)	-0.168 (0.126)

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level.

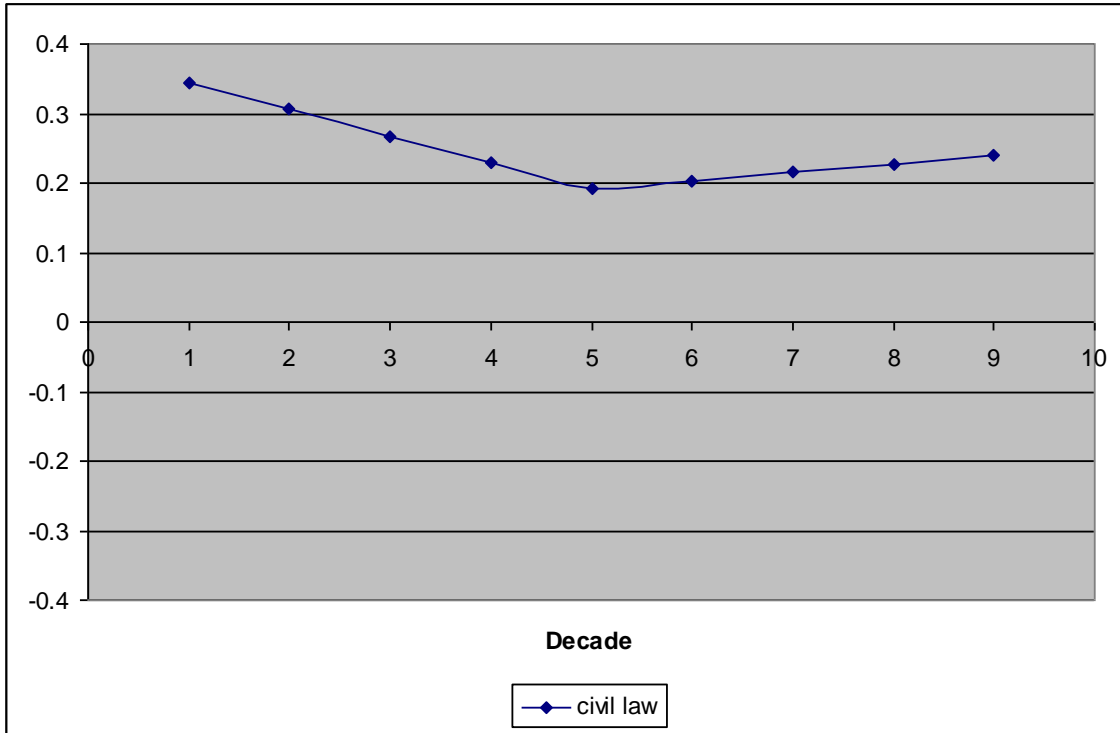Figure 5.4: Influence of Transportation on Retention

Influence of Transportation - Selected Decades

Years	Decade	No Partisan Elections	No Elections
1912-1920	1	0.142** (0.066)	0.180*** (0.060)
1951-1960	5	0.170*** (0.047)	0.204*** (0.058)
1991-2000	9	0.136*** (0.032)	0.146*** (0.052)

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level.

Figure 5.5 – Influence of Civil Law on Intermediate Appellate Courts

Influence of Initial Conditions on Intermediate Appellate Courts-Selected Decades

Years	Decade	Climate	Civil Law	Transportation
1912-1920	1	0.030	0.344**	-0.057
		(0.084)	(0.150)	(0.056)
1951-1960	5	0.070	0.191	-0.048
		(0.075)	(0.145)	(0.051)
1991-2000	9	0.035	0.239***	-0.040
		(0.051)	(0.083)	(0.028)

Notes: Standard errors are in parentheses, are robust, and are clustered at the state level.

Figure 5.6: The Evolution of Lawyers per 100,000
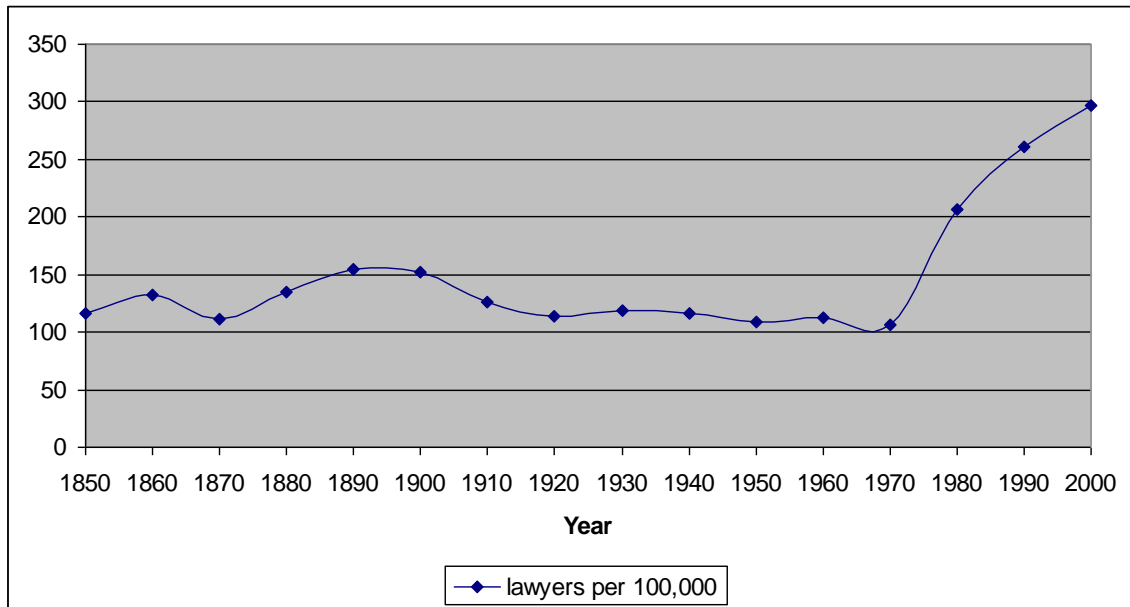
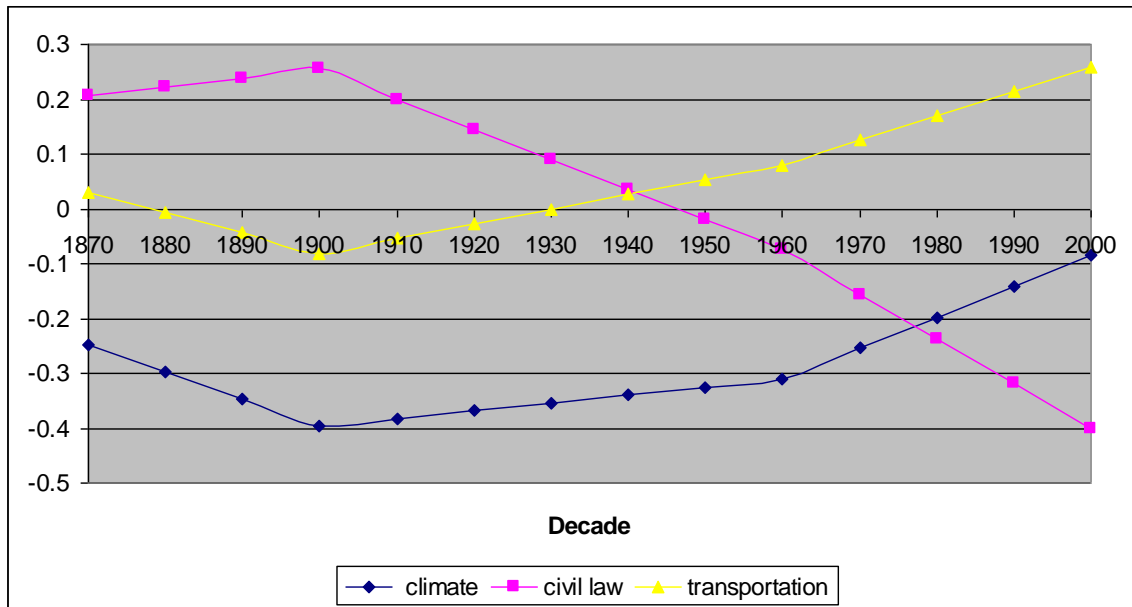Figure 5.7 – Influence of Initial Conditions on Lawyers per 100,000

References for Chapter 5

Beavers, Staci L. and Craig F. Emmert 2000. "Explaining State High-Courts' Selective Use of State Constitutions," *The Journal of Federalism* 2000 30(3):1-16

Becker, Daniel and Malia Reddick. 2003. *Judicial Selection Reform: Examples from Six States.* Des Moines Iowa: American Judicature Society.

Tim Besley, Tim and Abigail Payne, 2003. "Judicial accountability and economic policy outcomes: evidence from employment discrimination charges," IFS Working Papers W03/11, Institute for Fiscal Studies, revised .

Bohn, H. and Inman, R. 1996 "Balanced Budget Rules and Public Deficits: Evidence from the U.S. States." NBER Working Paper No. 5533. Cambridge, Mass.

Boylan, Richard T. and Cheryl. X. Long. 2003. "A Survey of State House Reporters' Perception of Public Corruption," *State Politics and Policy Quarterly*. 3(4): 420-438.

Brace, P., L. Langer and M. Hall. 2000. Measuring the preferences of state Supreme Court justices, *Journal of Politics* **62** (2000) (2), pp. 387–413.

Caldeira, Gregory A., 1983, "On the Reputation of State Supreme Courts," *Political Behavior*, 5(1): 83-108.

Canon, Bradley C. 1972. "The Impact of Formal Selection Processes on the Characteristics of Judges—Reconsidered." *Law and Society Review* 6 (May): 579–93.

Choi, Stephen J., G. Mitu Gulati and Eric A. Posner. 2007. "Professionals or Politicians: The Uncertain Empirical Case for an Elected Rather Than Appointed Judiciary." University of Chicago Law and Economics, Olin Working Paper No. 357.

Chapp, Joy A. and Roger A. Hanson. 1990. Intermediate Appellate Courts: Improving Case Processing. National Center for State Courts. April.

Glick, Henry Robert and Kenneth N. Vines, 1973. *State Court Systems*. Prentice Hall, Englewood Cliffs, N.J.

Glick, Henry R., and Craig Emmert. 1987. "Selection Systems and Judicial Characteristics: The Recruitment of State Supreme Court Justices." *Judicature* 70 (December–January): 228–35.

Gray, Cynthia. 2002, *A Study of State Judicial Disciplinary Sanctions.* Chicago, Illinois: American Judicature Society.

Hall, Kermit. 1984. "The Impact of Popular Election on the Southern Appellate Judiciary." in *Ambivalent Legacy: A Legal History of the South*. Edited by David J. Bodenhamer and James W. Ely, Jr. Jackson: University Press of Mississippi.

Hall, Melinda Gann. 1987. "Constituent Influence in State Supreme Courts: Conceptual Notes and a Case Study." *Journal of Politics*, 49:1117-24.

Hall, Melinda Gann. 1992. "Electoral Politics and Strategic Voting in State Supreme Courts." *Journal of Politics*, 54: 427-446.

Hall, Melinda Gann. 2001. "State Supreme Courts in American Democracy: Probing the Myths of Judicial Reform." *American Political Science Review* 95:315-330

Hanssen, F. Andrew, 1999, "The Effect of Judicial Institutions on Uncertainty and the Rate of Litigation: The Election versus Appointment of State Judges," *Journal of Legal Studies*, 28(1): 205-232.

Hanssen, F. Andrew, 2002 "On the Politics of Judicial Selection: Lawyers and State Campaigns for the Merit Plan", *Public Choice*, 110: 79-97 (2002)

Hanssen, F. Andrew, 2004a, "Learning About Judicial Independence: Institutional Change in the State Courts," *Journal of Legal Studies,* June.

Hanssen, F. Andrew, 2004b, "Is There a Politically Optimal Level of Judicial Independence?" *American Economic Review* 94: 712-29.

Huber, Gregory A. and Sanford C. Gordon. 2004. "Accountability and Coercion: Is Justice Blind when It Runs for Office?" *The American Journal of Political Science*. 48 (Apr.): 247-263.

Kagan, Robert A., Bliss Cartwright, Lawrence M. Friedman and Stanton Wheeler. 1978. "The Evolution of State Supreme Courts." *Michigan Law Review.* 76(6): 961-1005.

Kornhauser, Louis A., 2002. "Is Judicial Independence a Useful Concept?" In *Judicial Independence at the Crossroads: An Interdisciplinary Approach,* edited by Stephen B. Burbank and Barry Friedman. Thousand Oaks, CA: Sage.

Merryman, John, 1985. *The Civil Law Tradition.* Stanford University Press.

Public Integrity Section, selected years Public Integrity Section, 2001, *Report to Congress on the Activities and Operations of the Public Integrity Section.* Washington, DC: United States Department of Justice.

Tabarrok, A., and E. Helland, 1999, "Court Politics: The Political Economy of Tort Awards," *Journal of Law and Economics* XLII (1): 157-188.

U.S. Chamber of Commerce. Institute for Legal Reform. Various Years. *State Liability Systems Ranking Study.* Prepared by Harris Interactive, Rochester, N.Y.

U.S. Census Bureau. 2001.   *Federal, State and Local Governments: Government Finance and Employment Classification Manual*.

Wooldridge, Jeffrey M. *Econometric Analysis of Cross Section and Panel Data.* Cambridge, MA and London, England: MIT Press.

Table A1: Initial Conditions and Court Policies, Ordered Probits

Column	(1)	(2)	(3)
Dependent Variable	No Partisan Elections	No Elections	Operating Intermediate Appellate Courts
Climate	-0.250	0.474**	0.669**
	(0.272)	(0.236)	(0.315)
Climate*t_1	-0.170***	-0.097**	0.079
	(0.060)	(0.046)	(0.052)
Climate*t_2	0.074	0.012	-0.219***
	(0.049)	(0.034)	(0.060)
Civil	-0.807	-1.82***	1.42**
	(0.596)	(0.607)	(0.661)
Civil*t_1	0.123	0.361**	-0.190*
	(0.114)	(0.150)	(0.100)
Civil*t_2	-0.039	-0.107	0.163
	(0.084)	(0.121)	(0.114)
Transportation	0.459**	0.624**	-0.403
	(0.216)	(0.252)	(0.352)
Transportation*t_1	0.037	0.009	0.091
	(0.039)	(0.036)	(0.086)
Transportation*t_2	-0.011	-0.049*	-0.082
	(0.034)	(0.025)	(0.067)
Logged population	-0.422***	-0.236	2.06***
	(0.182)	(0.177)	(0.396)
Observations	432	432	432
Pseudo R-squared	0.242	0.170	0.477

Notes: In the case of intermediate appellate courts, standard errors are questionable because 58 observations are completely determined. Controls for national decadal time effects and a constant are estimated but not reported. Ordered probit estimates are conducted where 0 denotes a decade where there are either partisan election, elections or no intermediate appellate courts in a state, 1 denotes a decade where there are either no partisan elections, no elections or there are operating intermediate appellate courts in a state and 0.5 denotes a decade where either partisan elections or elections were removed or intermediate appellate courts were set up in the first through nine year of the decade. Each cell contains point estimates. Standard errors are in parentheses and are clustered at the state level and corrected for heteroskedasticity. The same convention holds for Table A2.

Influence of Climate-Selected Decades

Years	Decade	No Partisan Elections	No Elections	Intermed. App. Cts
1912-1920	1	-0.150 (0.272)	0.087 (0.261)	0.669** (0.315)
1951-1960	5	-0.831*** (0.285)	0.135 (0.206)	0.985*** (0.309)
1991-2000	9	-0.534*** (0.192)	0.624** (0.252)	0.108 (0.235)

Influence of Civil Law-Selected Decades

Years	Decade	No Partisan Elections	No Elections	Intermed. App. Cts
1912-1920	1	-0.806 (0.596)	-1.82*** (0.607)	1.42** (0.661)
1951-1960	5	-0.314 (0.515)	-0.373 (0.696)	0.660 (0.584)
1991-2000	9	-0.468 (0.430)	-0.801* (0.424)	1.31*** (0.486)

Influence of Transportation-Selected Decades

Years	Decade	No Partisan Elections	No Elections	Intermed. App. Cts
1912-1920	1	0.459** (0.216)	0.624** (0.252)	0.108 (0.235)
1951-1960	5	0.606*** (0.208)	0.659*** (0.209)	-0.403 (0.352)
1991-2000	9	0.563*** (0.154)	0.464*** (0.171)	-0.037 (0.294)

Notes: Standard errors are clustered at the state level and corrected for heteroskedasticity.