Initial Conditions, Institutional Dynamics and Economic Performance:

Evidence from the American States

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Abstract

Using state-level data from the United States, we find that initial legal systems in territories originally settled by Great Britain – a common law country – and in territories originally settled by France, Spain, and Mexico and the Netherlands - all civil law countries - have persistent effects on the quality of contemporary institutions. In order to explain these findings, we develop a transplant-civil law hypothesis that highlights the disruption associated with large-scale legal transplantation and the relative inefficiencies of civil law. We also propose an initial mortality hypothesis emphasizing the importance of the initial disease environment. We find strong support for both hypotheses and reject the null that initial conditions do not matter for contemporary institutions. Our results are robust to inclusion of variables capturing geography, climate, initial population and resource endowments. We use initial legal systems and initial disease environment to quantify the substantial impact of current institutions on current economic performance.

I. Introduction

A number of recent studies have examined the link between the quality of institutions that enforce property rights and maintain rule of law and economic performance. Early work by Knack and Keefer (1995) and Mauro (1995) establish that, at the national level, higher quality institutions are strongly associated with better economic performance. These findings have sparked a series of country-level studies that seek to explain the substantial cross-country variance in the quality of institutions. La Porta et al. (1997, 1998) find that, conditional on differences in GNP per capita, common law countries have better institutions that enforce rule of law and contracts. Djankov et al. (2002, 2003) and Botero et. al. (2003) find that common law countries have better regulatory institutions. Several studies down play the common-law civil-law distinction. Acemoglu, Johnson and Robinson (2001) show how the disease environment at time of colonization influenced initial institution building which, in turn, has had a long term effect on institutions in former colonies; Berkowitz, Pistor and Richard (2003) show the extent to which transplanted legal codes were adapted to local circumstances influenced initial institutions, which in turn has had a long term impact on the quality of institutions.

A potential caveat with cross-country analysis is that there is substantial within country variance in institutions. Jappelli et al (2002) document the variance in the quality of the judiciary in 27 Italian districts; Banarjee and Iyre (2002) document the variance in property rights across Indian states; and, Laeven and Woodruff (2003) show that there are large differences in legal system efficiency in Mexican regions. Furthermore, in countries such as India, there is also large cross-regional variance in initial legal traditions, conditions under which settlers operated and the process of legal transplantation.

In order to improve upon existing cross-country analysis, we use state-level data from the United States to examine whether initial differences in legal institutions and early disease environment in territory originally settled by Great Britain – a common law country – and in territory originally settled by France, Spain, Mexico, and the Netherlands – all civil law countries – have had persistent effects on state legal institutions. Civil law countries settled sixteen of the 48 continental American states (Alabama, Arizona, Arkansas, California, Florida, Illinois, Indiana, Louisiana, Michigan, Mississippi, Missouri, New Mexico, New York, Ohio, Texas, and Wisconsin)[1]. Great Britain acquired the territory encompassed by Illinois, Indiana, Michigan, New York, Ohio, and Wisconsin from France and the Netherlands prior to the American Revolution. The United States government acquired the territory encompassed by the other ten states from France, Spain, and Mexico. We divide the remaining thirty-two states into two categories: common law states and settler states. Common law states were originally settled by Great Britain, and settler states were essentially unpopulated at the time of the American Revolution. Either during the territorial period or in early statehood, all states except Louisiana adopted a common law legal system.

We consider three testable hypotheses related to initial conditions and the quality of institutions. The first is what we call the transplant-civil law hypothesis. This says that legal institutions are persistent. In our case, either transplantation acted as a negative (and persistent) shock to the legal system or colonial civil law was sufficiently bad that

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[1] Since we are interested in the operation of the legal system, we will make a distinction between territory that was actually settled by foreign governments and therefore had functioning legal systems and territory that was nominally controlled by these governments. Only states with evidence of substantial numbers of land grants as documented by the Report of the Public Lands Commission (1904) were considered settled. For the ten states acquired post-Revolution, there is also surviving evidence documenting that the civil legal systems were fully operational. Very little evidence has survived from the six states acquired prior to the American Revolution.

even if transplantation was neutral or mildly positive the net effect was negative. The second is what we call the initial mortality hypothesis and draws upon Acemoglu et al (2001). This says that legal institutions are persistent, but for a different reason. Here European colonists' likelihood of dying is important for institutions. The third is what we call the transitory hypothesis. This says that the effects of the original legal system, the transplantation of common law and the death rate of settlers may all have had short run effects on legal institutions and economic outcomes, but that time and mobility rendered these effects transitory.

In order to test these hypotheses we use several measures of contemporary and medium term institutions. Our primary measure of the quality contemporary institutions is based on a survey summarizing the quality of state courts and competence of state judges. We use a number of alternative measures on contemporary institutions including FBI and Department of Justice statistics on public corruption per capita and property and violent crimes per capita as well. To have comparable data for medium term institutions one would like to know something about the quality of the courts, crimes and corruption in 1900. Unfortunately, such data does not exist for this period. As a proxy for the quality of medium term institutions, we use two related measures – black and white lynching per capita (1889-1918) and voter participation per capita (1916 and 1920).

We find strong evidence supporting both the transplant-civil law hypothesis and the initial mortality hypothesis and we reject the transitory hypothesis. Initial legal systems are important determinants of medium term institutions and contemporary institutions and initial disease environment is an important determinant of contemporary institutions. Regarding medium term institutions, controlling for a host of covariates,

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states with an initial civil law tradition have had more lynching of blacks and lower voter participation in federal elections. This civil law effect accounts for the larger amount of black lynching in Alabama (civil law) versus Georgia, and in Arkansas (civil law) versus North Carolina during around the turn of the twentieth century. If we measure contemporary institutions with either quality of state courts, judicial competence, property crimes or violent crimes, then initial legal system and initial disease environment matter. For example, the fact that Connecticut is considered to have one of the finest court systems and Arkansas has one of the worst is can be largely accounted for by their difference in initial disease environment (Connecticut was free of yellow fever, and Arkansas had several epidemics) and initial legal systems (Connecticut was common law and Arkansas maintained a civil law tradition until around 1836, when it obtained statehood. If, however, we use public corruption as proxy for contemporary institutions, then only initial disease environment matters.

Finally, we use initial legal systems and disease environment conditions to measure the impact of institutions on state economic performance in 2001. A priori, the direction of causality between institutions and economic performance is ambiguous. Good institutions cause growth and development because they are necessary for attracting investment and financial markets. However, good institutions require substantial resources, for example, for salaries to attract good judges and police officers, for good courthouses and for police cars and other equipment that only rich economies can provide. Initial legal systems and initial disease environment are an important source of exogenous variation in the quality of contemporary institutions that enable us to calculate the substantial impact of institutions on state-level economic performance. For

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example, if we could rewrite history so that Arkansas switched over to a common law system before the American Revolution in 1776 and was free of yellow fever, then the improvement in current institutions would be associated with roughly a 10.6-percent increase in median household income and 4.5-percent drop in poverty in Arkansas. In the case of poverty, Arkansas in 2001 would have rates comparable to Ohio or Pennsylvania (See Appendix Table 1).

The rest of the paper is organized as follows. The next section develops our hypotheses about initial conditions and institutions. In section III we discuss the impact of initial systems in the states of the United States. Section IV analyzes the relationship between initial conditions and contemporary institutions and Section V uses initial conditions in order to analyze the relationship between contemporary institution and economic performance. Section VI concludes.

II. Three Hypotheses

In this section we develop the transplant-civil law hypothesis, the initial mortality hypothesis and the transitory hypothesis. In the next section, we then discuss data that would support or refute these hypotheses.

The literatures on the effects of transplanting a new legal system into an area with an existing legal system and on the relative merits of the common law and the civil law are both substantial. Regarding transplantation, Kalt and Cornell (1995, 2000) have documented an interesting experiment involving Native American tribes in the United States. In the 1930s, the federal government decided to impose upon tribal governments a common constitutional form. They provide compelling evidence that the subsequent economic success of these tribes has depended on match between a tribe's previous

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governmental structure and the new structure that was imposed upon the tribe. Tribes whose previous governmental structures were 'close' to the new structure, in the sense of having had a relatively centralized tribal governmental structure, were more successful than tribes who had more decentralized governmental structures. Berkowitz, Pistor and Richard (2003) document that countries that received common or civil law rather during the 19th and 20th centuries tended to have better institutions during the 1980s and 1990s if they adapted transplanted codes to their initial conditions and/or had a population that was familiar with the transplanted code. Rodrik (2000) provides case studies for his argument that well designed legal reforms in underdeveloped countries must be sensitive to initial conditions and must encourage local experimentation and participation.

In a series of papers, La Porta et al (1997, 1998, 1999) argue that common law is superior to civil law, at least in the late 20th century. Common law countries have more investor friendly laws that are conducive to the development of financial markets that are, in turn, critical for growth. Controlling for differences in GNP per capita, they find that common law countries have better institutions than French and German civil law countries. Djankov et al. (2002, 2003) and Botero et. al. (2003) provide additional evidence that common law countries generally are more business-friendly because their institutions regulate entry, labor markets and contract disputes more efficiently than civil law countries.

Whether the same type of argument holds for the 18th and 19th centuries is unclear. The big barrier is the lack of empirical evidence on the operation of both common and civil law legal systems during this period, either at the country level or in our case at the state level within the United States. Using country level data from the

early 20th century, Rajan and Zingales (2002) find that financial markets in countries with a civil law system were not less developed than those in countries with common law. This reversal in the relationship between legal systems and financial markets during the relatively short period between the early and late 20th century suggests that in the absence of historical data for the 18th and 19th centuries, nothing can be said about the relationship between civil and common law.

Although the papers stressing the process of transplantation and the importance of transplanting common versus civil law are distinct, in historical contexts such as ours where all of the transplanted regions were also civil law, it is not possible to identify the separate effects. Thus we consider the transplantation and civil law effects as a single hypothesis in the data analysis section. To better understand the mechanisms through which negative effects may have occurred, however, we will discuss the transplantation and civil law components separately.

Assume for the moment that colonial civil law was no better or worse than colonial common law. The transplantation of common law into civil law could have had three types of negative effects – bad laws, bad judges, or a mismatch between laws and norms. Under both civil law and common law, law is determined both by written laws and by case law or interpretation of law.[2] The relative weight of the two differs, but in both cases, law acts or is meant to act as a constraint on behavior. In the next section, we will show that the imposition of common law on civil law states and territories in the United States often led to a hybridization of law. If the hybrid law is inferior to pure

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[2] Throughout, we will make the distinction between laws – rules promulgated by the state – and norms – rules promulgated by groups of individuals. Neither laws nor norms will be considered meaningful unless there is enforcement. Enforcement may be either public (by the state) or private (by individuals including oneself).

common law, then this could lead to poor performance of legal institutions in former civil law states.

It may also have been that the disruption associated with the transition and the at-least-nominal requirement that the judge understand both civil and common law meant that former civil law states could only attract bad judges. Once this began, it could easily have become self-perpetuating. The effect of bad judges goes beyond bad decisions. Law enforcement can be thought of as taking place through three channels: individual internalization of the law, private enforcement of the law through the imposition of individual or community sanctions for non-compliance, and state enforcement of the law.[3] Note that two of these do not require action by the state. They do, however, require that the persons participating in the enforcement recognize the validity of the law. If individuals do not recognize the validity of the law because, for instance, of bad judges, then the extent of compliance with the law will depend entirely on enforcement by the state. Unless the expected penalties are large, this can lead to low levels of compliance.

Finally, the disruption associated with the transition may have led to a mismatch between the law and local norms. We begin by briefly discussing how norms can support or undermine laws.[4] Norms may generally support the law by encouraging, for instance,

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[3] Internalization is referred to in some contexts as first-party enforcement. Second party enforcement involves punishment by the person who is harmed. Third party enforcement involves punishment by individuals other than those who were directly harmed. Second and third party enforcement can take many forms including physical, financial, and ostracism.

[4] While individual internalization and social enforcement may specifically apply to the written rules promulgated by the state, they can also support written or unwritten social norms. These norms may exist within a state-sponsored legal system or in the absence of such a system. We will only consider the case where a state-sponsored legal system exists. We also only interested in social norms that are related to legal norms. Other social norms such as norms of reciprocity are unlikely to be affected by a change in legal system. (They may, however, be threatened by demographic trends such as an influx of foreigners into the population.)

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people not to litter. Alternatively, social norms may diverge from the law for a variety of reasons. Influential work by Lisa Bernstein (1992, 1996) and Robert Ellickson (1991), among others, has shown that groups may choose to be governed by norms when the law is not well suited to their purpose. Norms may also be heterogeneous, particularly in cases where there are large numbers of recent immigrants. To the extent that norms either literally embody the law or generally support the law, mismatches between laws and norms may diminish the quality of the legal system.[5]

Now assume that colonial civil law was worse than colonial common law and that the low quality of the civil law institutions persisted despite or even because of transplantation.[6] Analogous to the discussion above, poor pre-transplantation judges could lead to poor post-transplantation judges; poor pre-transplant law could lead to poor post-transplant law; and norms of little respect for the law pre-transplantation could continue post-transplantation.

The initial mortality hypothesis has received significant attention in the literature. Acemoglu et al (2001) highlight the importance of a colony's disease environment at time of settlement for long run institutions. European settlers operating in colonies stricken with life-threatening diseases expected that would have, on average, a short life on the colony. As a result, they built extractive institutions that enabled them to make money rapidly through exploitation of natural resources, the native population, or both

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[5] The strength of norms is suggested by the fact that people appear to have adhered to them even when the formal legal system was removed. In his book, <u>Law for the Elephant</u>, John Phillip Reid (1980) documented the remarkable extend to which individuals traveling on the Overland Trail adhered to what they understood to be the law, despite the fact that they were hundreds of miles from judges and sheriffs. Similarly it was a shared conception of the legal system and supporting norms that allowed miners during the California gold rush to establish mining districts, publish laws, and create order in the Sierras in the vacuum left by the federal government.

[6] Note that there is no historical evidence on the relative quality of the two legal institutions during the eighteenth century.

and then leave the colony. Europeans settling colonies that had much better health conditions expected to survive longer on the colony. Therefore, they invested in European style institutions that protected property rights and enforced rule of law. Because initial institutions tend to persist, the initial disease environment is an excellent proxy for the quality of current institutions.[7]

During late 18th and early 19th centuries within the United States, however, enslavement of the Native American (as opposed to the African) population was not prevalent, and most natural resources such as mineral and gas deposits would not be readily exploitable (or exploited) until the end of the nineteenth century (Wright 1990). We argue that the primary resource open for exploitation during this period was fertile land near water transportation. Land speculation had a venerable past within the United States and the substantial numbers of land grants in the former civil law states, some of which spanned tens or even hundreds of thousands of acres, greatly facilitated speculation (Lewis 1970, Swierenga 1968, Willieams 1949, Gates 1992).[8] Settlers could, and some did, farm the land they acquired through grant or purchase, where permissible importing slaves to provide labor.[9] Others were content to acquire land, often from the original grantees, hire lawyers and surveyors to oversee the confirmation and patenting processes before the appropriate United States authorities, and then resell the property to other speculators or farmers.

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[7] Engerman and Sokoloff (2002) make a related argument about the importance of initial geography and climate on subsequent income distribution and cultural heterogeneity which, in turn, has had a long run impact on the quality of institutions in the Americas. In our robustness analysis in tables 6 and 7, we include variables relevant to their argument.

[8] It is worth noting that one of the reasons that Spanish, French, and Mexican land grants were so large was precisely to attract colonists to what were considered remote and perhaps disease-ridden outposts of the empire.

[9] See Wright 2003 on the relationship between slavery, land quality, and the legality of slavery.

At the country level one might reasonably expect that time, mobility, and increasing economic integration and state-level democratic institutions would have caused institutional convergence. According to a Tiebout type argument, if constituents are mobile across states, then the competition between state governments for constituents who pay taxes would provide an incentive for state governments to take measures to upgrade their institutions. Thus, according to the transitory hypothesis, initial legal systems, transplantation and initial disease environment should not matter. In an effort to attract mobile tax-paying constituents, state governments would take measures to improve the disease environment and improve the legal system as well. Barro and Sala-I-Martin (1992) provide an argument and formal test for the argument that initial conditions should not matter for regions in the United States.

III. Initial Conditions

For the transplant-civil hypothesis to be relevant, two things would need to be true. First, the civil-law colonies would need to have had functioning legal systems. Otherwise, we would expect the adoption of common law to have the same effect as it did in the settler states. Second, at the time of the change we would expect to see some evidence of unhappiness with or resistance to change. The initial mortality hypothesis and the transitory hypothesis do not specify what would happen in the short run during the period of transition, although in the long run they imply that the original colonial legal system should not matter.

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A. Colonial Law

Although law in the North American Colonies drew on the parent country's legal tradition, in practice colonial legal systems differed substantially from the parent country's legal system. For French, Spanish, Mexican and Dutch colonies, the legal tradition was civil law, whereas in English colonies, the legal tradition was common law. Differences between the parent country's legal systems and the colonial legal system included: distance, a lack of legal books and qualified lawyers and judges, the different types of problems encountered in a colonial setting, a very different level of economic development than the parent country, and in some cases the specific beliefs of the colonists, such as the Puritans.[10]

We know comparatively little about how colonial civil law actually operated in the territory that Great Britain acquired from France prior to the American Revolution. The large number of land grants dating from the French colonial period that were later approved by the United States government, particularly in Illinois (936 grants), Indiana (862), and Michigan (942), suggests that the population was significant. Further, records from the village assemblies, which governed many aspects of village life, and records of disputes that made it to New Orleans suggest that there was something like formal judicial system.[11] Based on the number of land grants, the French population of Ohio (111) and Wisconsin (175) appears to have been smaller, so justice is more likely to have been provided by the local commandant. Dutch New Netherlands (which later became New York) is somewhat better documented, perhaps because the population was 9,000 in

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[10] Lawrence Friedman (1973), a prominent legal historian, described the process for the English colonies: "In developing bodies of statutory law, the colonies work within three distinct traditions: their own, that of their neighbors, and that of the mother country."

1664, the year that Great Britain acquired the territory. At least two books examine

facets of the colonial Dutch legal system and the transition to the colonial English legal

system.

The operation of colonial civil law in territory acquired after the American

Revolution is much better documented. Surviving court cases from Arkansas, California,

Florida, Missouri, Louisiana, New Mexico, and Texas document that French, Spanish,

and Mexican colonies all had fully functioning civil law legal systems prior to American

acquisition.[12] Those areas saw the full range of civil and criminal cases.

In general, we expect the entrenchment of the legal systems to be a function of

population, population density, and when the territory was acquired. Table 1a shows the

dates of statehood and the first census, the total population at the first census, the area of

the state, and the population per square mile at the first census for the 48 states in the

continental United States. The table is divided into four panels. The first panel includes

the common law states, which includes states on the east and west coasts that were

originally British colonies plus the British controlled territory east of the Mississippi. All

of the original thirteen colonies except for New York (which was originally under

jurisdiction of the Netherlands) are included in this group. The second and third panel

contains pre-revolution and post-revolution civil-law states. The pre-revolution states had

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[11] For more on French Illinois, see Eckberg (1998) and Briggs (1990). Unfortunately, there was only rarely a notary in the Illinois country and what notarial records there may have been have not survived.

[12] There has been an assumption by some historians that there was no legal system in some colonies prior to the American legal system. Book length legal histories that cover the colonial period exist for Arkansas, California, Florida, Missouri, Louisiana, and New Mexico and Texas. See Arnold (1985) on Arkansas, Banner (2000) on Missouri, Cutter (1995) on Texas and New Mexico, Fernandez (2001) on Louisiana, Langum (1987) on California, and Matthews (1987) on Florida. On Natchez, Mississippi see Holmes (1963) and on Mobile, Alabama see Hamilton (1910). For West Florida, see also *Archives of Spanish Government of West Florida, 1782-1816.* National Archives T1116. The legal history of West Florida (Alabama, Mississippi, Eastern Louisiana) is the subject of an article and a book chapter. Arizona was very

an operating civil law an operating civil law system prior to the 1776 American Revolution because they had significant confirmed land claims from France, the Netherlands and Spain, all civil law countries, during this period. After the French-Indian War in the 1760s, England acquired these territories and they received common law from either England or settlers from the American states. Post-revolution civil law states were originally settled by France, Spain or Mexico, and had substantial numbers of land grants from these countries, and were acquired subsequent to the American Revolution. The fourth column includes settler states: they were settled largely during the second half of the nineteenth century and had underdeveloped formal legal systems prior to settlement. When compared to the common law states, civil law states and settler states had smaller populations, larger total areas, and much lower population densities.

In almost all cases, a census of newly acquired territory occurred at the next decennial census. For instance, Arkansas became U.S. territory in 1803 and was part of the 1810 census. Since census estimates are an imperfect proxy for the population at the time of territorial acquisition, in Table 1b we have supplemented data for post-Revolution civil law state with acquisition dates and pre-acquisition population estimates. For the eight state in which data is available, six have substantial population increases prior to statehood and imposition of civil law.

B. *United States Acquisition*

As the United States acquired land from foreign governments, the issue of bringing the existing land and people into the United States legal system came to the fore. Early on territorial and state legislatures were effectively required to adopt American

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lightly populated during the period prior to American acquisition, so it is not surprising that a legal history does not exist.

common law.[13] This posed few problems, since the territory involved was very lightly populated and had been settled largely by British or American colonists. The Ordinance of 1787 (the Northwest Ordinance) and the Ordinance of 1798 (the Southwest Ordinance) established a system for new territory to become states and provided for a governmental structure during the territorial period. This governmental structure included a governor and three judges. The text of the statutes indicated that the governor and a majority of the judges had the power to "adopt and publish" laws, implying that territories had to adopt law already in use in existing states. Further, Congress could choose to veto laws it found unsuitable. Lawrence Friedman notes that the "adopt and publish" rule really just formalized what states and territories did anyway – borrow law, often from the states that the settlers had come from.[14]

Although the arrival of large numbers of American settlers eventually "doomed civil law everywhere except Louisiana," not all residents in the [post-Revolution] civil law states were happy with the change, nor was the adoption of the common law complete. For example, the local French population in Vincennes complained to the local judge that because of the imposition of common law, "laws are too complex, not to be understood and tedious in their operation."[15] A Missouri resident wrote to Thomas Jefferson in 1805 "Many people here do not like the Change & every Law that is pass'd puts them on a Worse Situation than they would have been under the Spaniards is Criticiz'd & the Worst Construction put on."[16] The dissatisfaction persisted, because John

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[13] Congress also appointed land commissions to bring land grants made by prior governments into the United States system of property rights. See Clay (1997).
[14] Friedman, p. 159.
[15] Friedman, p. 169.
[16] Banner, p. 95 quoting J. B. C. Lucas to Thomas Jefferson, 10 Dec 1805, Lucas Papers, box 2, Missouri Historical Society.

Coburn reported in 1807, the French are "unhappy at this particular period." Their major complaint was that, "the administration of Justice is dilatory," as a result of the new legal procedure.[17] No contemporary French commentary from Arkansas survives on common law, although Morris Arnold presents evidence suggesting that the French were not enamored of the new law. The French had a much lower per capita usage of the common law system, even considering their occupational status. Most disputes within the French community appear to have been settled by one of the elders. The adoption of common law engendered significant debate before the first meeting of the California legislature.[18] Elisha Crosby, the Chairman of the Judiciary Committee during this meeting noted "There was quite an element of Civil Law in the Legislature and many wanted that adopted as a rule."[19]

Although Jefferson wanted to Louisiana to adopt American common law, civil law was well entrenched and the native population was large.[20] Thus, in 1806 the territorial legislature chose civil over common law. Interestingly, what adopting civil law meant was not entirely clear because the law had not been codified. As a result, the Creole population clamored for a codification of existing law. A compromise was eventually reached, wherein Jefferson permitted the adoption of a civil code in 1808 in return for acceptance of American rule.

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[17] Banner p. 94 quoting John Coburn to James Madison, 15 Aug 1807, Robertson, Louisiana Under the Rule, 2: 359. See also Arnold, pp. 146-147.

[18] See Bancroft, p. 317, footnote 11 and J. Ross Browne, Report of the Debates in the Convention of California on the Formation of the State Constitution in September and October, 1849, Reprint Edition (New York: Arno Press, 1973), David Langum also provides some interesting quotes from American traders who lived in Mexican California about their dislike of civil law. See Chapter 5, especially pp. 146ff.

[19] Crosby p. 58

[20] This paragraph draws heavily on Dargo (1975).

During the transitional period, there was a tendency for the legal systems to be hybridized. The hybridization was in part by design. For example, the Northwest Ordinance continued for French and Canadian settlers in a few locations "their law and customs now in force among them, relative to the descent and conveyance of property."[21] American officials in Missouri wrote that they wanted "to assimilate by insensible means, the habits and customs of the American and French inhabitants; by interweaving some of the regulations of the latter into our Laws, we procure a ready obedience, without violence or complaint."[22] A few years later, however, civil law was abolished in Arkansas and Missouri. In Texas, California, New Mexico and Arizona, however, substantial amounts of civil law survived as it related to marital property and wills. Because the United States Supreme Court recognized property rights in land granted by prior governments, civil law also continued to have an effect on property rights in land.

Even in Louisiana, some hybridization occurred.[23] For instance, the territorial legislature adopted common law elements like trial by jury and habeas corpus. Through land commissions, property was brought into the American system. Merchants engaged in interstate trade adhered to the norms of the merchant communities elsewhere. And federal law as it applied to Louisiana was common law.

IV. Initial Conditions and Institutions

In this section, we begin by briefly describing the data. We then present tests for the transplant-civil law hypothesis, the initial mortality hypothesis and the transitory hypothesis. We reject the transitory hypothesis because we find that initial conditions

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[21] Quoted in Friedman, p. 168

[22] Friedman, p. 168 quoting Judge John Coburn to Secretary of State James Madison, 1807.

related to transplantation, civil law and the initial disease environment matter for the quality of medium term or contemporary institutions.

Variable definitions and summary statistics are presented in Tables 2 and 3. Our primary measure of quality of contemporary institutions is the quality of state courts as measured by the U.S. Chamber of Congress-States Liability Ranking Survey. The survey was a telephone survey of nationally representative sample of 824 senior attorneys at companies with annual revenues of at least $100 million conducted during November and December 2001. Attorneys evaluated the overall treatment of tort and contract litigation, timeliness of summary judgment/dismissal, discovery, scientific and technical evidence, judges impartiality, judges competence, juries' predictability and juries fairness on a discrete scale of 0 (worst) to 4 (best) for states for which they were familiar.[24] We use the average score over the 8 categories for each state. For the overall quality, the scores averaged 2.3 and ranged from a low of 1.2 for Mississippi to a high of 3.1 for Delaware. As an alternate measure of the quality of courts, we use the average score for the state for judges' competence. These scores averaged 2.5 and ranged from a low of 1.4 again for Mississippi to a high of 3.5 for Delaware. We also use three other indirect measures of the quality of contemporary institutions – annual average property crimes per 100,000 population for 1999-2001, annual average violent crimes per 100,000 for 1999-2001, and average federal public corruption convictions per 100,000 for 1992-2001.

To measure initial conditions, we use seven variables. Three are related to the colonial legal system; two are related to the disease environment; one captures membership in the confederacy; and one measures migration during 1870-1920. We

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[23] See Friedman, pp. 171-176.

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have divided the forty-eight states into four mutually exclusive categories based on their colonial legal systems: i) the six states that only had civil law prior to the American revolution, ii) the ten states that had civil law both before and after the American revolution, iii) the thirteen states did not have a colonial legal system, and iv) the nineteen states that had always been common law. Dummy variables were created for each of the first three categories. In all of our regressions, common law is the omitted variable. Regarding initial disease environment, yellow fever is a dummy variable that measures whether the state had at least five reported yellow fever epidemics during the 1700s and 1800s. Malaria is a dummy variable that measures whether malaria was considered to be endemic to the state in 1912. In the 1800s malaria existed in a number of other states, but the malaria problem was reportedly not as severe in those states as it was in the 1912 states. Migration is the inter-censal movement in (positive) and out (negative) of a state during 1870-1920 as a share of 1880 state population. This is the earliest data that we could obtain. This variable is critical for the transitory hypothesis, as migration is expected to eliminate the long run impact of initial conditions on the quality of institutions. Confederate state is a dummy variable that measures membership in the confederacy during the American Civil War. It is not important for testing our various hypotheses. However, we include it as to see if initial conditions are important or insignificant when we account for this historical division.

To measure medium term institutions and economic performance, we use three variables. In an ideal world we would have data on court quality at several points over the 200 years between the 2001 data on court quality and the data on initial conditions.

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[24] We exclude treatment of class action suits and punitive damages in our calculated average because these two categories cannot be determined in several states.

Using this data we could investigate the evolution of the institutions and the short and long run effects of the initial conditions. Unfortunately, to our knowledge no such data exists. We were, however, able to find data on lynching by race and voter participation rates during the late nineteenth and early twentieth centuries. Lynching per 1,000 can be thought of as a measure of the rule of law.[25] For blacks, it averaged 0.029, ranging from a low of 0 in twenty states including Maine and Washington to a high of 0.214 in Florida. The voter participation rate is a more indirect measure, which reflects the extent to which civil participation is broad-based. It averaged 55 percent, ranging from a low of 13 percent in South Carolina to a high of 80.6 percent in Delaware. We also include initial state per capita income as a share of the United States per capita income averaged over the years 1929 and 1940. It averaged 89 percent, ranging from a low of 38.6 percent in Mississippi to a high of 160 percent in Delaware.

To measure inputs into the legal system, we use five variables. With respect to how the judiciary arrive on the bench as of 1990, we divide states into three mutually exclusive categories: i) states where judges are appointed by the governor or the state legislature; ii) states where judges are appointed based on merit either by a non-partisan commission or by the governor based on a list presented by a non-partisan commission; and iii) states where judges are elected in partisan elections. Dummy variables were created for the first two categories and are measured relative to partisan elections. We also include three less direct types of inputs – the constitutional amendment rate, which is indicative of the stability of the legal institution; the number of lawyers per 1,000

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[25]An important source on lynching data is Elizabeth Hines and Eliza Steelwater, Project HAL: Historical American Lynching Data Collection Project,
http://people.uncw.edu/hinese/HAL/HAL%20Web%20Page.htm

residents; and a dummy variable for all states that have at least one law school in the top 50 as ranked by experts (judges and lawyers) in the U.S. News & World Report, 2001.[26] The amendment rate averaged 1.4 amendments per year, ranging from a low of 0.25 in Vermont to a high of 8.1 in Alabama; lawyers ranged from 1.847 per 1,000 in South Carolina to 6.862 in Massachusetts; seventeen of the forty-eight states have a top fifty law school.

Finally, we use two measures of current economic performance. The first is the log of the state's median household income in 2001. This averaged 10.64, ranging from a low of 10.32 in West Virginia to a high of 10.92 in Maryland. The other is the share of the population living under the poverty line in 2001. It averaged 12 percent, ranging from 6 percent in New Hampshire to 19 percent in Louisiana.

In Table 4A we present OLS regressions that examine the determinants of the quality of state courts. We begin by including the three types of variables – initial conditions, medium term institutions, and inputs into the legal system – separately. Because we have only forty-eight observations, our estimated standard errors will tend to be large when we include several explanatory variables. Thus, to improve efficiency, for the two columns where some variables are insignificant, we apply the general to specific technique as advocated by Hendry (2000) and report p-values for global exclusion restrictions. Finally, we include all three sets of variables, reporting the results of the general to specific technique.

In the first column, we investigate the relationship between having been a Confederate State during the American Civil War and the current quality of the state's

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[26] We also used the popular survey, but found that this had no explanatory power.

courts.[27] The relationship is negative, economically large and statistically significant. There are a number of possible causes. Confederate states may have had poorer quality judicial systems prior to the Civil War for reasons either related or unrelated to the institution of slavery. The Civil War and Reconstruction may also have represented a significant negative shock to the judiciary, independent of the previous quality of the judiciary.[28] The negative effect of being a Confederate state does not, however, survive the inclusion of the civil law and settler state distinctions, the health variables, and migration in columns 2 and 3.

In the next two columns, we use the measures of initial conditions to directly test all three hypotheses. We find evidence supporting both the transplant-civil and the initial mortality hypothesis and rejecting the transitory hypothesis. Consistent with transplant-civil and initial mortality hypotheses, the coefficients on civil law post-revolution and yellow fever are negative and significant in columns 2 and 3, suggesting that initial legal systems and the poor disease environment in the early nineteenth century continue to have a negative impact on the quality of state courts. The post-Revolution civil law dummy and yellow fever dummy account for 38.3-percent in the variance in the quality of state courts, and the p-value for the exclusion restriction of the other five initial conditions is an overwhelming .970.

The lack of significance of a number of variables in column 2 and their elimination from the regression by the general to specific approach is also notable. For

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[27] We ran a similar regression where confederate state was replaced with slave state. Slave states included the eleven confederate states and Delaware, Maryland, Kentucky and Tennessee. In part because of the inclusion of Delaware, the coefficient on slave state was smaller and the adjusted R-squared was much lower. The coefficient may also have been smaller, because these states experienced fewer negative affects related to the Civil War

[28] For example, Wahl (1998) shows that antebellum legal institutions effectively protected the value of rented slaves.

instance, although the coefficient on the dummy variable for a state having been civil law post-revolution is significant, the coefficient on the dummy variable for a state having been civil law pre-revolution is not. This is not entirely surprising, since the pre-revolution civil law states experienced transplantation earlier and had smaller populations at the time transplantation than the post-revolution states. Of the six pre-revolution states New York had the largest population – approximately 9,000 at the time of transplantation – but this also took place nearly 100 years before the other five states. The coefficient on settler states is also not significant. This indicates that settler states, like civil law pre-revolution states, are not distinguishable from states that had always been common law. Finally, as we noted, the coefficient on Confederate state is not significant.

If the effects of the transition and the disease environment were at least in part transitory, we might have expected the coefficient on migration as a percentage of 1870 population to have been positive and significant. This would have held to the extent that migration of individuals with a common law background led to greater respect for the law, greater match between the law and prevailing norms, or a larger pool of qualified judges. Because the migration variable is insignificant and the transplant civil law and initial disease environment variables are significant, we reject the transitory hypothesis.

In the middle two columns, we explore the effects of medium term institutions on the current quality of courts. Black lynching is the only variable that is significant in column 4 and the only variable surviving from the general to specific test in column 5. It accounts for approximately one third of the variance in quality of state courts. Although the other three variables are not significant, two of the three have the expected sign.

Greater lynching of whites is associated with lower quality courts, and higher state income in 1929 and 1940 is associated with higher quality courts. Perhaps because of its correlation with lynching, higher voter participation in 1916 and 1920 has a weakly negative effect on the quality courts. Thus, the transplant-civil hypothesis is not rejected and the initial disease hypothesis and transitory hypothesis are rejected for medium term institutions.

In the sixth column, we examine the effects of current inputs into the legal system. Not surprisingly, inputs have the greatest explanatory power among the first five columns and all of the coefficients are significant. In terms of how judges reach the bench, states that use appointment processes – whether merit or political – have much higher quality courts than states with partisan elections. This is consistent with the idea that judicial appointment provides greater independence to judges than partisan elections, and, that such independence improves the effectiveness of judges (see Hanssen 2002). Although these variables may be endogenous, they also suggest a way for states to improve quality of courts. Frequent changes to the state constitutions and greater numbers of lawyers per capita have a small negative effect, and a greater number of law schools in the top fifty has a small positive effect.

Combining all three categories of variables in a single regression provides another important test of the three hypotheses. Of the eight variables that were significant in columns 3, 5, and 6, five remain significant, including civil law post-revolution. Thus, even controlling for a large number of other variables, both transplantation and initial mortality conditions are statistically significant and have large effect. For example, Arakansas was a post-Revolution civil law state while Michigan was a pre-Revolution

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civil law state (see Appendix Table 1). The model predicts that this difference in initial conditions should account for a difference of 0.320, or approximately one standard deviation difference in the quality of their contemporary state courts. The actual difference for these two states is 2.4 (Michigan) minus 2.0 (Arkansas) equal to .4.

It is also interesting to note that when we include all three categories of variables, initial state income becomes significant and that black lynching drops out. Thus, while black lynching by itself is correlated with contemporary institutions, initial conditions as well more contemporary variables dominate it. With respect to the contemporary variables, the only changes of note are that the positive coefficients on merit and political appointment are smaller and the negative coefficient on lawyers per capita is larger.

In Table 4B, we explore the relationship between these medium term institutions and the initial conditions. Controlling for black share of the population, black lynching per capita is statistically and quantitatively higher in post-revolution civil law states. Voter participation per capita is also significantly lower in Confederate states and states that had yellow fever. A somewhat surprising result is that substantial out-migration from states is associated with greater voter participation. Thus, in both cases, rule of law as measured indirectly by lynching and voter participation was weaker in states that had either civil law post-revolution or yellow fever This suggests along with the results in columns 1 and 2 in Table 4A suggest that initial legal traditions and initial disease environment have had a negative effect on medium term institutions, and this effect has persisted.

In Table 4C we check whether the evidence in support of the transplant-civil and the initial mortality hypothesis is robust to alternative measures of the quality of courts

and the rule of law. Because it is unclear how inputs into the legal system enter into property crimes, violent crimes, and corruption, we only include variables related to initial conditions and medium term institutions. Civil law post-revolution is significant in four of the five regressions. Yellow fever or malaria – both mosquito borne diseases – are significant in all five regressions. Thus, the results in Table 4A columns 1 and 2 are robust: post-Revolution civil law and yellow fever are associated with poorer quality of courts and more property and violent crimes. Yellow fever, by itself, is associated with more corruption. It is notable that the initial condition of confederate state matters only in the case of violent crimes, but that it does not eliminate the civil law and initial disease environment effects. Migration has no explanatory power. Thus, our support of the transplant-civil and initial mortality hypotheses and our rejection of the transitory hypothesis are robust to the specification of the dependent variable.

V. Institutions and Economic Performance

In this section we use regression analysis to measure the influence of contemporary institutions on contemporary economic performance. Because there may be feedback between institutions and performance we need a source of exogenous variation in contemporary institutions in order to calculate their impact on performance. We show that initial conditions related to transplantation, civil law and initial disease environment are an excellent source of exogenous variation. We use these initial conditions in a two stage least squares analysis. We find that institutions have a very strong impact on economic performance, and that this is robust to inclusion of alternative institution measures and robust to the inclusion of variables capturing state population, natural resources, geography and climatic conditions.

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In Table 5, we explore the relationship between the two economic outcomes – log median household income and poverty – and the quality of the courts and state income in 1929-1940. We present both the OLS estimates and the two stage least squares estimates, where we instrument for the quality of the courts using the post-Revolution civil law dummy and the yellow fever dummy for comparison purposes. However, because the two-stage least squares estimates corrects for the potential endogeneity of contemporary institutions, we summarize only the two those results.

In the cases of both log median income and poverty, higher quality courts are statistically significant and lead to better economic outcomes. For example, the first stage estimates in Panel B show that if we could rewrite history and eliminate yellow fever epidemics and a civil law tradition after the American Revolution, then quality of contemporary state courts would increase by roughly .625 (or about 1.8 standard deviation). This in turn, would be associated with 0.170*0.625 = 10.6% increase in median household income and 7.27*.625 = 4.5% fall in the poverty rate.

Regarding the over-identification tests in Panel D, civil law and yellow fever were not individually significant, indicating that they influence economic outcomes purely through their impact on institutions. Migration 1870-1920, although excluded from the first stage by the general to specific approach, does appear to be directly negatively related to economic performance. This would hold if the marginal person migrating was poorer than average. All other initial conditions excluded from the first stage have no direct effect on economic performance in the second stage.

The results are robust when we use corruption 1992-2001 as a proxy for contemporary institutions (see Appendix Table 2): corruption has a substantial negative

impact on performance; although migration no influence on corruption or economic performance. In unreported regressions we find that property crimes and violent crimes (1999-2001) are also robust. For property crimes we use Civil law: post Revolution and malaria as instruments, for violent crimes we use these two initial conditions and the Confederate state dummy (see Table 4c). Neither crime variable is significant in the log median household income regressions. However, they both significantly increase poverty; and, so does migration.

In Tables 6 and 7, we check if our two stage least square estimates are robust to the inclusion of variables measuring initial population and natural resources, geographic and climatic conditions. Engerman and Sokoloff (2002) argue that these conditions determined in part production patterns, income distribution, and ethnic homogeneity in the Americas after they were colonized and are, thereby, critical for the development of contemporary institutions. Some of these variables also capture the initial disease environment. Regarding population and natural resources, we report results for three variables in Table 6: initial population density at time of statehood as a proxy for the initial development of institutions and initial income at time of settlement, the respiratory TB death rate in 1937 for initial disease environment (this the earliest reported date and respiratory TB as well as influenza were leading causes of death in the 1930s) and a petroleum and natural gas state dummy based on 1919 production to capture initial resource endowments. In unreported regressions we find that four additional variables have no statistical significance in the first and second stage: the total death rate in 1937, the influenza death rate in 1937, a Roman Catholic dummy for states with predominately Roman Catholic Church membership in 1926 and a mining state dummy in 1919.

The statistical significance of state courts and initial conditions still holds after we include any of these seven population and natural resource variables. In the seven log median household income regressions, quality of state courts is significant at the 5-percent level five times and at the 10-percent level twice; in the poverty regressions it is always statistically significant at the 1-percent level. In the first stage regression for quality of state courts, the Civil law: pre-revolution dummy is always statistically significant at the 1-percent level, and the yellow fever dummy is always statistically significant at the 5-percent level. The signs of initial conditions and courts are always robust. An important finding is that the petroleum and natural gas dummy for 1912 is negatively associated with state courts.[29] One interpretation of this result is that substantial initial mineral wealth encourages rent seeking and thereby corrupts institutions (see Sachs and Warner 1999). Initial population at time of settlement is positively associated with economic performance, and the respiratory TB death rate is positively associated with poverty.

Regarding geography and the climate, we report results for the following five sets of variables in Table 7: whether or not a state is next to a coast; distance to major lakes and the ocean; distance to a major river and to a navigable river; latitude and longitude; and climate (annual average precipitation, annual average humidity and annual average temperature).[30] Again, the statistical significance of contemporary institutions and initial conditions is robust to inclusion of these variables. In the five log median household income regressions, quality of state courts is significant at the 5-percent level four times

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[29] In the over-identification test, we also find that the petroleum and natural gas dummy has no significant direct impact on performance.

[30] See Rappaport and Sachs (2001) for an analysis of how these variables influence convergence in economic performance across the American States.

and at the 10-percent level once; in the poverty regressions it is always statistically significant at the 1-percent level; in the first stage regression the Civil law: post revolution dummy is significant at the 1-percent level three times and at 5-percent level twice; the yellow fever dummy is significant at the 5-percent level three times and at 10-percent level twice. Remarkably, the only geography-climate variable that has a statistically significant effect on institutions is distance to navigable river. One interpretation for this result is that closeness to ports and major transport nodes creates rent seeking and corruption. In fact, the estimated positive (though statistically insignificant) effects of distance to major lakes, distance to ocean, distance to major river and the negative effect (though also statistically insignificant) of the coastal dummy on institutions is consistent with this interpretation. Finally, it is notable that several of these variables have a statistically significant effect on economic performance that does not depend upon institutions as we measure them; the coastal dummy is positively associated with log median household income, distance to a major lake is positively associated with poverty; longitude is negatively associated with poverty; and, higher annual precipitation and lower annual temperature lower poverty.

VI. Conclusions

Cross country analysis of the determinants of institutions has emphasized the distinction between common law and civil law origins, initial disease environment, the process of transplantation and variables related to geography, climate and natural resource endowments. In this paper we have tested several of these ideas at a sub-national level using state-level data from the United States. We have found that initial

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conditions associated transplantation-civil law and initial disease environment can explain a large share of the variance in contemporary institutions, which in turn explain a substantial share of the cross-state variance in performance. Except for initial reserves of petroleum and natural gas, variables related to geography, climate and natural resource endowments do not explain the variance in quality of institutions. Our results hold for various measures of contemporary institutions and performance. Finally, these initial conditions have enabled us to pin down reasonable estimates of the substantial impact of institutions on economic performance.

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Table 1a: Population of Newly Acquired Territory

State	Year of Statehood	First Census	Population at first census	Area of State in Square Miles	Pop. /Sq. Mile
Common Law States					
Connecticut	1788	1790	237,946	5543.3	42.92
Delaware	1787	1790	59,096	2489.3	23.74
Georgia	1788	1790	82,548	59424.8	1.39
Maine	1820	1790	96,540	35384.7	2.73
Maryland	1788	1790	319,728	12406.7	25.77
Massachusetts	1788	1790	378,787	10554.6	35.89
New Hampshire	1788	1790	141,885	9349.9	15.17
New Jersey	1787	1790	184,139	8721.3	21.11
North Carolina	1789	1790	393,751	53818.5	7.32
Oregon	1859	1850	12,093	98380.6	0.12
Pennsylvania	1787	1790	434,373	46055.2	9.43
Rhode Island	1790	1790	68,825	1545.1	44.55
South Carolina	1788	1790	249,073	32020.2	7.78
Vermont	1791	1790	85,425	9614.3	8.89
Virginia	1788	1790	691,737	42774.2	16.17
Washington	1889	1850	1,201	71299.6	0.02
West Virginia	1863	1790	55,873	24229.8	2.31
Average	1805	1797	205472	30800.7	15.61
Post-Revolution Civil Law States					
Alabama	1819	1800	1,250	52419.0	0.02
Arizona	1912	1860	6,482	113998.3	0.06
Arkansas	1836	1810	1,062	53178.6	0.02
California	1850	1850	92,597	163695.6	0.57
Florida	1845	1830	34,730	65754.6	0.53
Louisiana	1812	1810	76,556	51839.7	1.48
Mississippi	1817	1800	7,600	48430.2	0.16
Missouri	1821	1810	19,783	69704.3	0.28
New Mexico	1912	1850	61,547	121589.5	0.51
Texas	1845	1850	212,592	268580.8	0.79
Average	1847	1827	51420	100919.1	0.44

Pre-Revolution Civil Law States

Illinois	1818	1800	2,458	57914.4	0.04
Indiana	1816	1800	2,632	36417.7	0.07
Michigan	1837	1800	3,757	96716.1	0.04
New York	1788	1790	340,120	54556.0	6.23
Ohio	1803	1800	42,159	44824.9	0.94
Wisconsin	1848	1820	1,444	65497.8	0.02
Average	1818	1802	65428	59321.2	1.22
Average: New York excluded					0.22
Settler States					
Colorado	1876	1860	34,277	104093.6	0.33
Idaho	1890	1870	14,999	83570.1	0.18
Iowa	1846	1840	43,112	56271.6	0.77
Kansas	1861	1860	107,206	82276.8	1.30
Kentucky	1792	1790	73,677	40409.0	1.82
Minnesota	1858	1850	6,077	86938.9	0.07
Montana	1889	1870	20,595	147042.4	0.14
Nebraska	1867	1860	28,841	77353.7	0.37
Nevada	1864	1860	6,857	110560.7	0.06
North Dakota	1889	1870	2,405	70699.8	0.03
Oklahoma	1907	1890/4	61,834	69898.2	0.88
South Dakota	1889	1860/5	4,837	77116.5	0.06
Tennessee	1796	1790	35,691	42143.3	0.85
Utah	1896	1850	11,380	84898.8	0.13
Wyoming	1890	1870	9,118	97813.6	0.09
Average	1867	1849	30727	82072.5	0.47

Table 1b: Estimates of Pre-Acquisition Population

Post-Revolution Civil Law States					
	Year Acquired by US	Date Pop. Estimate	Population	First US Census	Population at first census
Alabama[31]	1813	1812	<1,000	1800	1,250
Arizona[32]	1848/1853	1846	<1,000	1860	6,482
Arkansas[33]	1803	1798	400	1810	1,062
California[34]	1848	1846	10,000	1850	92,597
Florida	1821			1830	34,730
Louisiana[35]	1803/1810	1803	43,000	1810	76,556
Mississippi	1813			1800	7,600
Missouri[36]	1803	1804	9,373	1810	19,783
New Mexico[37]	1848/1853	1846	65,000	1850	61,547
Texas[38]	1846/1848	1836	40,000	1850	212,592
Average				1827	51,420

Notes: Arkansas, Louisiana, and Missouri were acquired as part of the Louisiana Purchase. The northern portions of Alabama and Mississippi were part of the original territory acquired from Great Britain. The U.S. established control of western Louisiana, and southern Alabama and Mississippi in 1810, 1813, and 1813. This territory was formally acquired along with Florida from Spain in 1821. Parts of Arizona and New Mexico, all of California, and the questionable title to Texas, which had been independent and then opted to join the U.S. in 1846, were acquired from Mexico in 1848. Additional territory in southern Arizona and New Mexico were acquired as part of the Gadsden Purchase in 1853.

[31] Population estimate is for the part of Alabama controlled by the Spanish. The largest city in this area was Mobile. Hamilton, pp. 405 (1812), 447 (1818).
[32] Weber, pp. 183-184.
[33] Arnold, Appendix IV, p. 222.
[34] Langum, p. 23, Table 1.
[35] Dargo, p. 6.
[36] Cited in Banner, p. 14, footnote 9.
[37] Weber, p. 195.
[38] Weber, p. 177.

Table 2: Description of Selected Variables

Variable	Description	Sources
Initial conditions		
Civil-law states: post-revolution	States that were originally settled by France, Spain, or Mexico, and had substantial numbers of land grants from these countries and were acquired subsequent to the American Revolution.	Clay (1997), Table 3.
Civil-law states: pre-revolution	States (Illinois, Indiana, Michigan, New York, Ohio and Wisconsin) that had an operating civil law system prior to the American Revolution because they have significant confirmed land claims from France, Netherlands and Spain prior to 1776. After the French-Indian War in the 1760s England acquired these territories and they received common law from either England or settlers from American states	
Civil-law states	Pre-revolution and post-revolution civil law states	
Common-law states	British colonies including east and west coast states that were originally part of these colonies plus the British controlled territory east of the Mississippi (exclude Civil-Law pre-Revolution).	State histories from Encyclopedia Britannica Online
Confederate states and Slave states	States that were members of the confederacy during the American Civil War; States that had significant slave population prior to the Civil War.	"Confederate States of America" from Encyclopedia Britannica Online
Yellow fever	States that had al least five bouts of yellow fever epidemics during the 1700s and 1800s.	World Health Organization, Geneva, 1998, Appendix I.
Malaria	States that with malaria in 1912.	Pan American Health Organization, 1969.
Settler states	Neither common nor civil laws states.	State histories from Encyclopedia Britannica Online
Migration, 1870-1920	Inter-censal migration into and out of state between 1870 and 1920 as a share of 1880 population.	Historical Statistics of the United States, 1975, C 25-75
Medium term initial conditions and institutions		
Initial state income	State per capita as a share of United States per capita income, averaged for 1929 and 1940 (and, as a robustness check, averaged for 1929, 1940 and 1949).	Historical Statistics of the United States, 1975; Part 1, pp. 243-245; and U.S. Bureau of Economic Analysis, and Survey of Current Business, various editions.
Lynching of blacks	Lynching of blacks and white per 1,000 people (1910 population) during 1889-1918.	Thirty Years of

Lynching of whites		Lynching in the United States 1889-1918, 1919.
Voting participation in federal elections	Average voter participation rate in federal elections in 1916 and 1920.	Historical Statistics of the United States, 1975; Part 2, pp. 1071-1072.
Contemporary Economic Performance		
Log Median Household Income, 2001	Data based on current population survey.	U.S. Census Bureau, 2001 Supplementary Survey.
Poverty, 2001	Share of population living under the poverty line.	U.S. Dept of Commerce, Bureau of Economic Analysis, Regional Accounts Data, September 2002.
Contemporary Institutions, Direct Measures		
Quality of state courts, 2001	Telephone survey among nationally representative sample of 824 senior attorneys at companies with annual revenues of at least $100 million conducted during November and December 2001. Attorneys evaluated overall treatment of tort and contract litigation, timeliness of summary judgment/dismissal, discovery, scientific and technical evidence, judges impartiality, judges competence, juries' predictability and juries fairness on a discrete scale of 0 (worst) to 4 (best) for states for which they are familiar,[39] and an average is reported for each category in each state. We use the average score over the 8 categories for each state.	U.S. Chamber of Congress-States Liability Ranking Study, 2002
Judges' competence, 2001	Average score on a discrete scale of 0 to 4 for judges' competence.	
Institutions, Indirect Measures		
Lawyers per capita, 2001	Resident active attorneys as December 2001, per 1,000, population (measured in 2001).	American Bar Association, 2002.
Quality of state law schools: general opinion, 2001	1 for all states that have at least one law school in the top fifty, 0 otherwise.	U.S. News & World Report, "The Best American Graduate Schools", April 9, 2001.
Quality of state law schools: expert opinion, 2001	1 for all states that have at least one law school that is rated at least 3.5 on a scale of 1 to 5 by a panel of expert lawyers and judges.	

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[39] We exclude treatment of class action suits and punitive damages in our calculated average because these two categories cannot be determined in several states.

Table 2-continued		
Institutions, indirect measures		
Public Corruption	Federal public corruption convictions by district over 1992-2001, per 100,000, population (measured in 1996).	Report to Congress on the Activities and Operations of the Public Integrity Section, 2001.
Violent crimes	Annual average for 1999-2001 per 100,000, population. Violent crimes are offenses of murder, forcible rape, robbery and aggravated assault; property crimes include offenses of	Crime in the United States 1999-2001: Uniform Crime Reports, FBI, 2000-2002
Property crimes	burglary, larceny-theft, and motor vehicle-theft (data on arson are not included). Murders and non-negligent homicides associate with the events of September 11, 2001 are excluded.	
Rules: judicial selection[40] and stability of constitution		
Merit system, 1990	Procedures (versus partisan election) include a merit plan appointment; an appointment by the governor taken from a list compiled by a nonpartisan nominating commission,	Hanssen, 2002a,b; and various editions of The Book of the States and The American Bench.
Appointment, 1990	Procedures (versus partisan election) include an appointment by the governor; an initial appointment by governor and retention in an uncontested retention election; appointment by the state legislature; nonpartisan election.	
State constitution amendment rate	As of 1991, the number of times that the state constitution has been amended divided by number of years in effect.	G. Alan Tarr, ed., Constitutional Politics in the United States, 1996.

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[40] Hanssen (2002a) argues that procedures in the merit, 1990 category provide the most judicial independence, procedure appointment, 1990 category provide less and partisan elections provide the least judicial independence. He also notes that if we use retention instead of selection procedures in 1990 then all states except two stay in the same group. Pennsylvania and Illinois have partisan election selection procedures but they merit based retention procedures. We test for the robustness of judicial selection and retention in the econometric analysis.

Table 3: Selected Summary Statistics

Variable	Variable Type	Timing	Average	Standard Deviation	Minimum	Maximum
Civil-law: post-Revolution	Dummy relative to common law state	Status prior to 1776 or at time of statehood	.208	.410	0	1
Civil law: pre-Revolution			.125	.334	0	1
Settler State			.271	.449	0	1
Common Law State			.396	.494	0	1
Yellow fever, 1700&1800s	Dummy for all states having at least five major epidemics	1700-1880	.146	.357	0	1
Malaria 1912	Dummy for states with major outbreaks	1912	.417	.498	0	1
Confederate State	Dummy relative to all other states	Status prior to 1863	.229	.425	0	1
Slave State			.313	.468	0	1
Migration, 1870-1920	Estimated net inter-censal migration of total as a share of 1880 population	1870-1920	.268	.517	-0.72	2.338
Initial state income	Relative annual average	1929 & 1940	89.1%	31.9%	38.6%	160%
Lynching of blacks	Per 100,000 1910 population	1889-1918	0.029	0.054	0.000	0.214
Lynching of whites			0.016	0.031	0.000	0.199
Voter participation	Average participation rate in federal elections	1916 & 1920	55.2%	18.4%	13.05%	80.6%
Log Median Household Income	Annual survey	2001	10.64	0.15	10.32	10.92
Poverty rate			12.0%	3.0%	6.0%	19.1%
Quality of state courts	Survey of senior law firm partners	2001	2.32	0.35	1.2	3.1
Judges' competence			2.47	0.37	1.4	3.5

Table 3 – continued						
Lawyers per capita, 2001	Per 1,000 inhabitants	2001	3.080	1.193	1.847	6.862
Law School Quality, 2001: Expert opinion	Annual Survey of Judges and Lawyers	2001	.313	.468	0	1
Judicial selection procedures						
Merit system, 1990	Versus partisan elections; dummy variables	1990	0.375	0.489	0	1
Appointment, 1990			0.396	0.494	0	1
State constitution amendment rate	Annual average	Through 1990	1.414	1.387	0.25	8.07

Table 4-Determinants of Institutions						
Panel A-Dependent Variable is Quality of State Courts						
	1	2	3	4	5	6	7
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Civil-law state: post-Revolution		-.320** (.124)	-.368* (.104)				-.339* (.080)
Civil-law: pre-Revolution		.010 (.146)	X				X
Settler state		.011 (.122)	X				X
Yellow fever, 1700s&1800s		-.283** (.138)	-.322* (.119)				X
Malaria, 1912		-.032 (.130)	X				X
Confederate State	-.360* (.107)	-.073 (.148)	X				X
Migration, 1870-1920		.013 (.092)	X				X
Initial state income, 1929&40				.130 (.158)	X		.263*** (.138)
Lynching 1889-1918 of Blacks				-3.456* (1.264)	-3.758* (.764)		X
Lynching of Whites				-.044 (1.394)	X		X
Voter participation, 1916&20				-.0004 (.0036)	X		X
Judges: Merit vs. partisan elections						.607* (.096)	.497* (.089)
Appointment vs. partisan elections						.513* (.093)	.319* (.090)
Constitution amendment rate						-.066** (.025)	X
Lawyers per capita, 2001						-.059*** (.032)	-.105* (.034)
Law School Quality, 2001						.214** (.083)	.204* (.071)
Constant	2.405* (.107)	2.453* (.089)	2.446* (.0450)	2.329* (.259)	2.431* (.764)	2.099* (.117)	2.105* (.108)
P-value for exclusion of X			.970		.876		.313
Adjusted R²	.179	.321	.383	.295	.331	.525	.653

Notes: In this table and all other tables, *, ** and *** denote significance at the 1-percent, 5-percent and 10- percent levels.

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Table 4		
Panel B: Medium Term Institutions		
Dependent Variable	Black Lynching, 1889-1918	Voter Participation, 1916&1920
Civil-law: post-Revolution	.0344* (.00933)	X
Yellow Fever, 1700s&1800s	X	-9.459** (3.918)
Confederate State	X	-35.805* (3.373)
Migration, 1870-1920	X	-5.266* (2.480)
Black population share, 1910	.250* (.0233)	X
Constant	-.0048 (.0042)	66.2* (1.65)
Excluded variables	Civil law: pre-Revolution, Settler, Malaria, Yellow Fever, Initial Income, Migration, Confederate	Civil law: pre-Revolution and post-Revolution, Settler, Malaria, Yellow Fever, Initial Income; Black population share.
P-value for exclusions	.807	.949
Adjusted R^2	.803	.791

Table 4 Panel C: Current Institutions and Initial Conditions					
Dependent Variable	Quality of State Courts	Judicial Competence	Property Crimes	Violent Crimes	Corruption
Civil-law state: post-Revolution	-.316* (.104)	-.262* (.114)	578.9** (283.4)	110.8*** (63.4)	X
Civil-law: pre-Revolution	X	X	X	X	X
Settler state	X	X	X	X	X
Yellow fever, 1700s&1800s	-.307* (.116)	-.322** (.127)	X	X	2.124* (.545)
Malaria, 1912	X	X	589.6** (233.4)	131.4** (60.9)	X
Confederate state	X	X	X	161.2** (77.6)	X
Migration, 1870-1920	X	X	X	X	X
Initial state income, 1929&40	.249*** (.126)	.342** (.138)	X	304.0* (85.1)	X
Lynching 1889-1918 of Blacks	X	X	X	X	X
Lynching of Whites	X	X	X	X	X
Voter participation, 1916&20	X	X	X	X	X
Constant	2.212* (.127)	2.268* (.139)	3212.1* (130.6)	39.2 (89.6)	2.426* (.208)
P-value for exclusion of X	.942	.837	.884	.759	.632
Adjusted R^2	.420	.384	.289	.393	.232

Notes: Malaria dummy = 1 if state had outbreaks during 1912, 0 otherwise. Data for 1881 is not used because almost all of the states were afflicted. Malaria results are based on a reading of a coarse map and will be revised when data for map is received. Yellow fever dummy = 1 if there were 5 or more major outbreaks during the 1700s and 1800s, 0 otherwise (robust if we use 3 or more major outbreaks).

Table 5-Two Stage Least Squares Estimates Panel A-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.171** (.073)	-7.27* (1.48)
Initial state income	.244* (.053)	-2.24** (1.09)
Panel B-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.316* (.104)	
Yellow fever	-.307** (.116)	
Initial state income	.249*** (.123)	
Adjusted R^2	.420	
Panel C-OLS Estimates		
	Median income	Poverty
Quality of state courts, 2001	0.170* (0.043)	-5.44* (0.843)
Initial state income	0.244* (0.047)	-3.01* (0.914)
Adjusted R^2	0.586	0.639
Panel D – Tests of Over-Identification		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Civil-law: post-Revolution	.022 (.067)	1.09 (1.26)
Yellow fever	-.021 (.065)	-1.057 (1.440)
P-value for first stage exclusions*	.133	.399
Significant variable-Migration	-.070** (.030)	1.034 (.627)

Variables excluded from first stage are Civil: pre-Revolution, Settler, Malaria, Confederate state, and Migration

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Table 6: Robustness Check – Population and Natural Resources

Two Stage Least Squares Estimates with Initial Population Density Panel A1-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.158** (.070)	-7.040 (1.403)
Initial state income	.202* (.057)	-1.385 (1.157)
Initial population density	.00276** (.00137)	-.0550*** (.0276)
Panel B1-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.327* (.105)	
Yellow fever	-.303** (.117)	
Initial state income	.299** (.142)	
Initial population density	-.00314 (.00397)	
Adjusted R²	.415	

2SLS with TB (respiratory) Death Rate in 1937 Panel A2-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.167** (.076)	-6.289* (1.417)
Initial state income	.245* (.054)	-2.564** (1.011)
TB (respiratory) death rate, 1937	-.00004 (.0004)	.0158** (.0078)
Panel B2-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.343* (.122)	
Yellow fever	-.299** (.119)	
Initial state income	.243*** (.128)	
TB (respiratory) death rate, 1937	.00057 (.00129)	
Adjusted R²	.409.	

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2SLS with Petroleum-Natural Gas Dummy Panel A3-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.147*** (.078)	-7.040* (1.609)
Initial state income	.262* (.056)	-2.445** (1.150)
Petroleum and Natural Gas, 1919	-.0586 (.0378)	.760 (.777)
Panel B3-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.308* (.098)	
Yellow fever	-.260** (.111)	
Initial state income	.290** (.121)	
Petroleum and Natural Gas, 1919	-.211** (.085)	
Adjusted R^2	.480	

Notes: To check for the effects of population and natural resources we also tested for total death rate (1937), influenza death rate (1937), states where Roman Catholics have the highest membership in religious bodies in 1926, and mining states that produced at least 1-percent of United States mining output in 1919 and found that these variables were insignificant in both the first and second stages, and these variables did not weaken the statistical significance of yellow fever, civil-law post revolution and state courts in the first and second stages. The petroleum and natural gas dummy = 1 if state produces at least 1 percent of the value of United State mining output value n 1919. Results are robust to using the state's share of the value of output in 1919.

Table 7: Robustness Check – Geography and the Climate

Two Stage Least Squares Estimates with Coastal Dummy Panel A1-Second Stage		
Dependent Variable	Log Median Household Income	Poverty Rate
Quality of state courts, 2001 (instrumented)	.230* (.0780)	-7.707* (1.672)
Initial state income	.208* (.055)	-1.976 (1.188)
Coastal Dummy	.0607** (.0300)	-.436 (.642)
Panel B1-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.314* (.106)	
Yellow fever	-.300** (.125)	
Initial state income	.253*** (.131)	
Coastal Dummy	-.0148 (.0859)	
Adjusted R^2	.407	
2SLS with Distance to Major Lakes and the Ocean Panel A2-Second Stage		
Dependent Variable	Log Median Household Income	Poverty Rate
Quality of state courts, 2001 (instrumented)	.168*** (.087)	-6.921* (1.672)
Initial state income	.233* (.064)	-2.038* (1.228)
Distance to a major lakes	-.0000184 (.0000212)	.000907** (.000405)
Distance to ocean	-.0000212	.000469
P-value for joint exclusion	(.0000365) .587	(.000698) .078
Panel B2-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.335* (.116)	
Yellow fever	-.232*** (.125)	
Initial state income	.313* (.134)	

	Log Median Household Income	Poverty Rate
Distance to a major lakes	.0000479 (.0000644)	
Distance to ocean	.0000127 (.0000871)	
P-value for joint exclusion	.288	
Adjusted R^2	.427	

2SLS with Distance to major river and navigable river Panel A3-Second Stage		
Dependent Variable	Log Median Household Income	Poverty Rate
Quality of state courts, 2001 (instrumented)	.164** (.076)	-7.436* (1.536)
Initial state income	.235* (.054)	-1.868 (1.137)
Distance to major river	.00031 (.00036)	-.000518 (.000721)
Distance to navigable river	-.0000356 (.0000609)	.00178 (.00123)
P-value for joint exclusion	.600	.296

Panel B3-First Stage Dependent Variable is Quality of State Courts in 2001	
Civil-law: post-Revolution	-.347* (.104)
Yellow fever	-.246** (.121)
Initial state income	.274** (.128)
Distance to major river	.0000141 (.000976)
Distance to navigable river	.000275*** (.000159)
P-value for joint exclusion	.236
Adjusted R^2	.433

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2SLS with latitude and longitude Panel A4-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.250** (.010)	-6.432 (1.862)
Initial state income	.239* (.054)	-2.002*** (1.011)
Latitude	-.00577 (.00459)	-.0627 (.0858)
Longitude	-.000108 (.000947)	-.0437** (.0177)
P-value for joint exclusion	.221	.051
Panel B4-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.320** (.138)	
Yellow fever	.274** (.127)	
Initial state income	.245*** (.136)	
Latitude	.00285 (.0128)	
Longitude	-.00177 (.00295)	
P-value for joint exclusion	.769	
Adjusted R²	.400	

2SLS with climate variables Panel A5-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Quality of state courts, 2001 (instrumented)	.219* (.105)	-5.849* (1.892)
Initial state income	.241* (.055)	-2.110** (.999)
Annual average precipitation	.00151 (.00164)	-.0613** (.0295)
Annual average humidity	-.000285 (.00272)	.0460 (.0491)
Annual average temperature	.000824 (.00277)	.105* (.0501)
P-value for joint exclusion	.658	.063
Panel B5-First Stage Dependent Variable is Quality of State Courts in 2001		
Civil-law: post-Revolution	-.338** (.138)	
Yellow fever	-.241*** (.135)	
Initial state income	.241 (.136)	
Annual average precipitation	-.00427 (.00474)	
Annual average humidity	.00176 (.00758)	
Annual average temperature	.00137 (.00832)	
P-value for joint exclusion	.763	
Adjusted R^2	.395	

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Appendix Table 1 - Initial Conditions, Contemporary Institutions and Performance										
	Qual. of Courts	Corr-uption	Log Med. Income	Pov-erty. Rate	Civil Post-Rev.	Civil Pre-Rev.	Settler	Yellow Fever	Mal-aria	Migr.. Rate	Confed erate State
States										
Alabama	1.6	3.00	10.51	16.5	1	0	0	1	1	-0.04	1
Arizona	2.5	1.55	10.62	13.7	1	0	0	0	0	0.89	0
Arkansas	2.0	1.44	10.37	15.4	1	0	0	0	1	-0.01	1
California	2.1	2.89	10.76	12.8	1	0	0	0	1	0.47	0
Colorado	2.6	0.41	10.82	9.6	0	0	1	0	0	0.53	0
Connecticut	2.6	2.13	10.88	7.3	0	0	0	0	1	0.14	0
Delaware	3.1	2.43	10.83	9.8	0	0	0	0	0	0.01	0
Florida	2.2	4.84	10.55	12.5	1	0	0	1	1	0.23	1
Georgia	2.4	3.10	10.66	11.7	0	0	0	0	1	-0.03	1
Idaho	2.5	3.33	10.55	12.0	0	0	1	0	0	1.38	0
Illinois	2.2	5.54	10.77	11.2	0	1	0	0	0	0.06	0
Indiana	2.5	1.85	10.64	9.8	0	1	0	0	0	-0.02	0
Iowa	2.7	1.01	10.65	9.7	0	0	1	0	0	-0.02	0
Kansas	2.6	1.57	10.62	11.3	0	0	1	0	0	0.07	0
Kentucky	2.1	4.03	10.52	15.4	0	0	0	0	1	-0.07	0
Louisiana	1.6	5.98	10.41	19.1	1	0	0	1	1	-0.01	1
Maine	2.5	3.04	10.56	10.6	0	0	0	0	0	-0.01	0
Maryland	2.4	1.76	10.92	8.1	0	0	0	0	1	0.01	0
Massachusetts	2.2	2.82	10.80	8.7	0	0	0	0	0	0.14	0
Michigan	2.4	1.64	10.76	10.6	0	1	0	0	0	0.12	0
Minnesota	2.5	1.25	10.87	7.8	0	0	1	0	0	0.18	0
Mississippi	1.2	7.06	10.41	18.6	1	0	0	1	1	-0.06	1
Missouri	2.3	3.30	10.69	11.7	1	0	0	0	1	-0.03	0
Montana	2.0	3.50	10.40	14.6	0	0	1	0	0	1.66	0
Nebraska	2.6	0.54	10.66	10.3	0	0	1	0	0	0.16	0
Nevada	2.3	2.04	10.72	9.7	0	0	1	0	0	0.04	0
New Hampshire	2.5	0.60	10.84	6.0	0	0	0	0	0	0.03	0
New Jersey	2.3	3.36	10.86	7.9	0	0	0	0	0	0.19	0
New Mexico	2.1	2.28	10.45	17.7	1	0	0	0	1	0.08	0
New York	2.4	4.47	10.65	13.4	0	1	0	1	0	0.10	0
North Carolina	2.4	1.37	10.57	14.1	0	0	0	0	1	-0.05	1
North Dakota	2.5	6.15	10.49	12.1	0	0	1	0	0	1.40	0

Appendix Table 1 - Initial Conditions, Contemporary Institutions and Performance (continued)										
	Qual. of Courts	Corr- uption	Log Med. Income	Pov- erty. Rate	Civil Post- Rev.	Civil Pre- Rev.	Settler	Yellow Fever	Mal- aria	Migr.. Rate	Conf. State
States											
Ohio	2.4	4.34	10.66	11.0	0	1	0	0	0	0.05	0
Oklahoma	2.1	2.60	10.45	15.5	0	0	1	0	1	1.06	0
Oregon	2.5	0.77	10.66	13.4	0	0	0	0	1	0.47	0
Pennsylvania	2.3	3.13	10.65	10.7	0	0	0	1	0	0.05	0
Rhode Island	2.2	2.64	10.71	12.0	0	0	0	0	0	0.14	0
South Carolina	2.1	3.37	10.55	13.4	0	0	0	1	1	-0.05	1
South Dakota	2.6	4.58	10.56	11.6	0	0	1	0	0	0.19	0
Tennessee	2.4	3.26	10.51	14.3	0	0	0	0	1	-0.07	1
Texas	1.9	2.38	10.61	15.0	1	0	0	0	1	0.11	1
Utah	2.6	0.77	10.79	8.6	0	0	1	0	0	0.10	0
Vermont	2.5	1.68	10.64	10.4	0	0	0	0	0	-0.04	0
Virginia	2.7	3.04	10.80	9.3	0	0	0	0	1	-0.04	1
Washington	2.7	1.89	10.71	10.8	0	0	0	0	1	2.34	0
West Virginia	1.5	2.30	10.32	17.2	0	0	0	0	0	0.03	0
Wisconsin	2.6	1.43	10.75	9.8	0	1	0	0	0	0.04	0
Wyoming	2.5	2.87	10.60	11.4	0	0	1	0	0	1.01	0
Average all states	2.3	2.7	10.64	12.0	0.2	0.1	0.3	0.1	0.4	0.27	0.3

Appendix Table 2 2SLS with Corruption Panel A-Second Stage		
Dependent Variable	Log Median Household Income, 2001	Poverty Rate, 2001
Corruption, 1992-2001 (instrumented)	-.0388*** (.0200)	1.30* (.486)
Initial state income	.291* (.0477)	-4.48* (1.16)
Panel B-First Stage Dependent Variable is Corruption, 1992-2001		
Yellow fever	2.08* (.558)	
Initial state income	-.264 (.625)	
Adjusted R^2	.218	
Panel C-OLS Estimates		
	Median income	Poverty
Quality of state courts, 2001	-.0301* (.0096)	.736* (.221)
Initial state income	.297* (.0459)	-4.85* (1.06)
Adjusted R^2	.545	.427
Panel D – Tests of Over-Identification		
Dependent Variable	Median Income	Poverty
P-value for first stage exclusions*	.511	.153
Significant variable- Civil-Law: Post-Revolution		2.213** (1.023)

Variables excluded from first stage are Civil: pre-Revolution and post-Revolution, Settler state, Malaria, Confederate state, and Migration