American Economic Journal: Economic Policy 2009, 1:2, 138–162
http://www.aeaweb.org/articles.php?doi=10.1257/pol.1.2.138

The Divergence of Legal Procedures†

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Simeon Djankov et al. (2003) introduce a measure of the quality of contract enforcement—the formalism of civil procedure—for 109 countries as of 2000. For 40 of these countries, we compute procedural formalism every year since 1950. We find that large differences in procedural formalism between common and civil law countries existed in 1950 and widened by 2000. For this area of law, the findings are inconsistent with the hypothesis that national legal systems are converging, and support the view that legal origins exert long lasting influence on legal rules. (*JEL* K41, O17)

Both the standard historical narrative and recent empirical research show that national legal systems vary systematically according to the legal traditions or origins that countries belong to. In particular, both substantive and procedural legal rules and regulations of civil (or Roman) law countries differ systematically from those of common (or English) law countries (Konrad Zweigert and Hein Kotz 1998; La Porta, Lopez-de-Silanes, and Shleifer 2008). The observed variation raises a number of questions. Are these observed differences in laws and regulations merely a figment of recent data, or have they been present historically as well? Are legal rules coming from different legal traditions converging? Answers to these questions are central to the interpretation of legal origins, since some degree of permanence of their influence is central to the accounts of why they matter today. In addition, we wish to know which factors—economic, political, or even internal to the legal system itself—determine the nature and the pace of legal change.

In this paper, we examine the design of the legal process for civil litigation in 40 countries between 1950 and 2000. We focus on civil procedure, defined as the "body of law concerned with methods, procedures and practices used in civil litigation" (Henry Campbell Black 1991). We follow Simeon Djankov et al. (2003), who analyzed procedural rules governing the adjudication of simple legal disputes (the eviction of a nonpaying tenant and the collection of a bounced check) for 109 countries in 2000. For each dispute in each country, Djankov et al. (2003) computed

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The authors are grateful to Nicola Gennaioli, Louis Kaplow, and Giacomo Ponzetto for comments. Country-level sources of data are available from the authors upon request.
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"procedural formalism," a measure of how heavily the law regulates the procedure. Then they showed that procedural formalism is significantly higher in civil law (and particularly French civil law) countries than it is in common law countries, that higher formalism is associated with longer time to pursue a claim but not with greater perceived fairness of the process, and that formalism serves as a useful indicator of the inefficiency of the legal system.

Because data are vastly more limited going back 50 years, we study only 40 generally somewhat richer than average countries, while making sure we cover all legal traditions (except socialist) and levels of economic development. Using the methodology of Djankov et al. (2003), we measure procedural formalism for both disputes, for each country, every year for the period 1950–2000. We then look at the differences among legal traditions in 1950 and in 2000, at the convergence of procedural formalism between legal origins over time, as well as at the determinants of its evolution, including income, democracy, left-wing politics, and legal origins themselves.

According to the comparative law scholars, legal procedure is the purest (perhaps the defining) expression of legal traditions (Mirjan R. Damaska 1986; Zweigert and Kotz 1998). The nature of pleadings, the roles lawyers play, the approaches to collecting evidence, the importance of trial, and the selection and function of judges are among the most basic features that differ among legal origins. France and England have historically developed very different styles of social control of economic life and legal institutions to support these styles. In France, the state sought to make sure that judges implemented its objectives, an approach reflected in heavily formalized and judge-centered civil procedure (Damaska 1986; Edward L. Glaeser and Shleifer 2002; La Porta, Lopez-de-Silanes, and Shleifer 2008). In England, this policy-implementing function of law was not as central, so a less formalized, more litigant-centered civil procedure developed. Over time, these different approaches to legal procedure became part of broader differences in legal styles, and were transplanted to much of the world through conquest and colonization.

Despite these fundamental initial differences, many comparative law scholars believe that the common and civil law systems are converging. According to John Henry Merryman, David S. Clark, and John O. Haley (1994),

> "the strategies or modes of convergence of the Common Law and Civil Law fall under three main headings: active programs for the unification of law, the transplantation of legal institutions, and the tendency of nations with similar political, economic, and social features to develop similar legal systems—a process that might be called 'natural convergence' … Much of the movement toward convergence of the Civil Law and the Common Law is traceable not to deliberate efforts to impose unification, nor to transplantation, but merely to the tendency of nations otherwise similar in important respects to have similar problems and to arrive at similar legal ways of perceiving and dealing with them" (22–23).

"[The common and civil law] convergence may be explained both as a matter of equity and as a matter of efficiency" (Ugo Mattei 1997, 18). Mauro Cappelletti (1989), Adrian A. S. Zuckerman (1999), Basil S. Markesinis (1994), Rudolf B. Schlesinger et al. (1998), Joachim Zekoll (2006), and Louis F. Del Duca (2007) all sound similar themes.

Several writers note convergence not just in general, but with respect to procedure in particular. "Even in the domain of the procedure, where most of the long-lasting institutional differences [between common and civil law] resided, we see at play large phenomena of convergence" (Mattei 1997, 204). "There are, therefore, grounds for believing that although the Common Law and the Civil Law started off from opposite positions, they are gradually moving closer together even in their legal methods and techniques" (Zweigert and Kotz 1998, 271). "… there is a slow convergence in procedural matters as the oral and written types of trial borrow from each other and are slowly moving to occupy a middle position …"(Markesinis 1994, 30). Thus, even for this purest expression of legal traditions, there is a general perception of convergence.[1]

This perception is not universal, however. According to Pierre Legrand, a leading expositor of nonconvergence, "convergence, even if it were thought desirable (which in my view, it is not), is impossible on account of the fact that the differences arising between common law and civil law mentalities at the epistemological level are irreducible" (Legrand 1996, 61). In the specific area of civil procedure, "certain 'core' elements of procedural law are bound to resist harmonization" (Friederich K. Juenger 1997, 933). Konstantinos D. Kerameus (1997, 926–29) likewise enumerates various structural elements of common and civil law that undermine harmonization and convergence. With such diversity of expert opinion, the issue must be addressed with systematic measurement. The present paper is the first systematic empirical attempt to measure legal rules, and their evolution, for many countries over a long period of time.

In Section I, we describe our strategies of data collection. Section II presents our basic facts. In our sample of 40 countries, for the two simple disputes we focus on, large differences in the formalism of the legal procedure between common and civil law countries existed in 1950 and grew over time. We examine the robustness of these findings, and suggest an interpretation. Section III looks at other determinants of the evolution of legal procedure; although some of them matter, the effect of legal origins remains statistically and economically significant. Section IV concludes.

I. Measuring Formalism

Our analysis is based on a dataset that tracks the evolution of the formalism of the legal procedure for adjudicating simple disputes in 40 countries during the period 1950–2000. We combine data on the formalism of legal procedure in 2000 from Djankov et al. (2003) with newly-collected data on its evolution between 1950 and 2000.

A. *The Formalism of Legal Procedure in 2000*

Djankov et al. (2003) relied on questionnaires answered by practicing attorneys at Lex Mundi and Lex Africa member firms in 109 countries. The questionnaires were

[1] All the scholars mentioned above also discuss convergence in substantive areas of law. See also Henry Hansmann and Reinier Kraakman (2000) and Ronald J. Gilson (2001) on functional convergence in corporate law.

designed to cover the step-by-step evolution of two simple civil suits: the collection of a bounced check, and the eviction of a tenant for non-payment of rent. The chosen suits represented ordinary cases of default that are most likely to be relevant to many citizens, and were designed to be comparable, regardless of a country's culture or location.

The attorneys were instructed to describe the most common civil procedures used by litigants in practice, subject to detailed case facts. Specifically, for check collection, the value of the claim is assumed to be 5 percent of gross national product (GNP) per capita, while for tenant eviction one month's rent equals 5 percent of GNP per capita with three months of rent in arrears. The claim is filed in 2000 in the country's largest city, where both parties reside. It is assumed that service of the process into the defendant's hands is not possible, but that notification of the proceedings is finally accomplished. In the check collection case, the plaintiff is also assumed to request provisional pretrial attachment as a remedial measure if this is possible, and the court grants this request. Each party attempts to present documentary evidence and to call one witness, if possible, and the judge decides the case in favor of the plaintiff. No appeals or post-judgment motions are filed, and the plaintiff then takes all necessary steps for prompt enforcement of the judgment.

To measure formalism, Djankov et al. (2003) began with a conceptual model of an ideal court where disputes between two neighbors are resolved by a third neighbor on fairness grounds (Martin Shapiro 1981). All countries reject the neighbor model in favor of a more heavily regulated procedure. The formalism index was designed to capture the extent of deviation from the neighbor model, where higher values indicated procedural systems that differ more from this model. Formalism is defined as the sum of seven subindices, which are briefly described below, and formally defined in the Appendix.

The first area measures the required degree of specialization of courts and professionalism of judges and lawyers. Because specialized courts generally have less formal rules and are aimed at bringing justice to the masses, these are assumed to be closer to the neighbor model than general courts. Similarly, nonprofessional judges and the absence of legal representation are closer to the neighbor model. The second area measures the predominance of written versus oral elements in the proceeding. Since the neighbor model would rely on oral submissions, requirements for written submissions are accorded higher values in the formalism index. The third area measures the need for legal justification in the parties' motions and in court decisions, as well as basing the judgment in the law as opposed to equity. Requirements that court decisions be based exclusively on the law or that the parties present legal justification are deviations from the neighbor model. The fourth area measures the degree of statutory regulation of evidence. No restrictions on admissible evidence exist in the neighbor model, where the judge and parties could freely present and consider the evidence before reaching a decision. The fifth area refers to the control of the superior review of the first instance judgment. Automatic suspension of execution is considered to be a departure from the neighbor model. Similarly, comprehensive review and interlocutory appeals (those of interim judicial decisions) are also seen as departures from the neighbor model. The sixth

area refers to the engagement formalities required for initiating the suit and notifying the parties of the proceedings. Such formalities are absent from the neighbor model, and therefore raise the formalism index. Finally, the seventh area measures the (normalized) minimum number of independent procedural actions required to complete the suit given the case facts.

Djankov et al. (2003) aggregate their indicators from these seven areas into an overall index of procedural formalism of dispute resolution in each country. They find that, in 2000, such formalism is systematically higher in civil law countries than it is in common law countries, and is associated with higher expected duration of judicial proceedings, and lower perceived consistency, honesty, and fairness of courts. Their results, however, provide no information about the history of procedural formalism.

B. *The Formalism of Legal Procedure Since 1950*

The primary empirical contribution of this paper is to compute the formalism index in 1950 for 40 countries, and trace its evolution over the subsequent half-century. Starting with the 109 country sample of Djankov et al. (2003), we eliminated:

- former and current socialist countries,
- nations that are still colonies and protectorates, and
- countries that gained their independence after 1970.

We included the origin countries and main colonizers in the sample, for a total of nine. This left us with potentially an additional 69 countries to include. Each country took 2–3 weeks of full-time work to code, so due to time and budget constraints we aimed for a sample of 40 countries. We tried to balance legal origins, as well as geographic and income per capita representation. In particular, we tried to avoid overrepresentation of Europe and Latin America. Except for England and France, we had no prior knowledge as to which countries reformed their legal procedures. For many countries, the necessary data were not available in 1950 either at all or in a language we understood. The tried-but-failed-to-find-data list includes the Dominican Republic, El Salvador, Honduras, Denmark, Finland, Greece, Norway, Turkey, Indonesia, Jordan, Lebanon, Singapore, South Korea, Thailand, Cote d'Ivoire, Egypt, Ghana, Malawi, and Swaziland. Because we stopped at 40 countries, we never tried to find data for Barbados, Costa Rica, Ecuador, Guatemala, Panama, Paraguay, Trinidad and Tobago, Uruguay, Cyprus, Iceland, Ireland, Luxembourg, Malta, Monaco, Switzerland, Israel, Kuwait, Taiwan, and Zambia. The final sample covers 18 common law and 22 civil law countries, as listed and described in Table 1.

We start in 1950 because it marks the beginning of the post-war period, which witnessed significant political and economic changes across the world that had an important influence on civil justice. Most comparative law discussions of convergence focus on the post-war era. In 1950, some countries in the sample were still

TABLE 1—FORMALISM INDEX BETWEEN 1950 AND 2000

Country	Formalism index 1950	Formalism index 2000	Formalism 2000 / formalism 1950	Formalism index 1950	Formalism index 2000	Formalism 2000 / formalism 1950
Panel A	Eviction of a tenant			Collection of a check		
Common law countries						
Australia	2.82	2.01	0.71	2.67	1.78	0.67
Belize	2.42	2.75	1.14	2.11	2.08	0.99
Botswana	3.70	3.92	1.06	3.58	3.88	1.08
Canada	3.50	2.35	0.67	2.43	2.06	0.85
Hong Kong	2.83	3.51	1.24	2.79	0.71	0.25
India	4.08	3.61	0.88	3.75	3.32	0.89
Jamaica	2.34	2.37	1.01	2.38	2.35	0.99
Kenya	3.39	2.94	0.87	3.11	3.07	0.99
Malaysia	3.40	3.31	0.97	2.94	2.32	0.79
New Zealand	2.05	1.35	0.66	1.54	1.55	1.01
Nigeria	3.32	2.85	0.86	3.11	3.10	1.00
Pakistan	4.03	3.54	0.88	3.75	3.42	0.91
South Africa	3.87	3.69	0.95	3.56	1.65	0.46
Sri Lanka	3.26	3.80	1.17	3.00	3.63	1.21
Tanzania	3.51	2.73	0.78	3.35	3.55	1.06
United States	3.23	2.84	0.88	2.32	2.62	1.13
Uganda	2.78	1.79	0.64	2.95	2.59	0.88
United Kingdom	3.21	2.57	0.80	3.24	2.59	0.80
Common law mean	3.21	2.88	0.90	2.92	2.57	0.89
Common law median	3.29	2.85	0.88	2.97	2.59	0.95
Civil law countries						
Argentina	4.58	5.68	1.24	4.43	5.33	1.20
Austria	3.48	3.69	1.06	3.20	3.50	1.09
Belgium	2.29	3.22	1.41	2.32	3.16	1.36
Bolivia	4.38	5.25	1.20	5.19	5.74	1.11
Brazil	4.38	3.85	0.88	4.35	3.04	0.70
Chile	4.88	4.77	0.98	4.83	4.67	0.97
Colombia	4.18	4.14	0.99	3.33	3.98	1.19
France	2.17	3.74	1.73	1.50	3.36	2.24
Germany	3.58	3.69	1.03	3.26	3.36	1.03
Italy	5.64	4.24	0.75	5.18	4.02	0.78
Japan	3.96	3.73	0.94	3.32	2.95	0.89
Mexico	3.88	5.04	1.30	4.38	4.71	1.08
Morocco	3.83	4.81	1.25	3.81	5.15	1.35
Netherlands	3.28	3.05	0.93	3.21	3.05	0.95
Peru	4.77	5.55	1.16	5.38	5.59	1.04
Philippines	3.41	5.13	1.51	2.56	4.99	1.95
Portugal	5.03	4.64	0.92	4.51	4.12	0.91
Senegal	4.42	4.29	0.97	4.28	5.04	1.18
Spain	5.20	5.00	0.96	5.61	5.45	0.97
Sweden	3.43	3.37	0.98	2.85	2.96	1.04
Tunisia	3.56	3.47	0.97	3.65	3.48	0.95
Venezuela	5.31	5.80	1.09	5.16	5.81	1.13
Civil law mean	4.07	4.37	1.10	3.92	4.25	1.14
Civil law median	4.07	4.26	1.01	4.04	4.07	1.06
Mean for all countries	3.68	3.70	1.01	3.47	3.49	1.03
Median for all countries	3.53	3.69	0.97	3.29	3.36	0.99
Panel B. Tests of means (*t-stats*)						
Civil versus common law	3.52	5.91	3.11	3.46	5.58	2.64

Notes: This table classifies countries by legal origin. Panel A shows the formalism indices for the case of the eviction of a nonpaying residential tenant and the collection of a bounced check in 1950, 2000, and the 2000/1950 ratio of each index. Panel B shows the *t*-statistics for the test of difference in means between common and civil law countries in our sample. All variables are described in the Appendix.

colonies, and others had not yet reformed their legal systems due to other political arrangements (e.g., the British Commonwealth).[2]

To measure formalism in 1950, we begin by reviewing all legislation and procedural rules applicable to the case facts in Djankov et al. (2003).[3] As in the 2000 dataset, we code the procedure most likely to be used in practice given the remedies available under the law. If the set of possible procedures was the same in 1950 as it was in 2000, we choose the procedure suggested by the attorneys in the original questionnaires. In 41 out of 80 cases (including both eviction and check collection), the procedure coded for 2000 did not exist in 1950. For 29 of these 41 cases, only one potential procedure existed in 1950 either overall or for our case facts. For another 10, there was more than one option, but secondary sources, such as practitioner manuals, point to the likely procedure for our case facts, which we coded. In only two cases, Brazil and Spain, we could not find a country-specific secondary source arguing for a particular procedure, so we selected procedures used in "similar" countries. All our results are robust to the exclusion of Brazil and Spain.

Having identified the procedure most likely to be used in 1950, coding is straightforward, as formalism is primarily determined by statute. A key exception is that the number of required steps relies heavily on actual court practice.[4] We use attorney manuals to determine the number of required steps but worry about measurement error since, unlike Djankov et al. (2003), we cannot confirm this coding with practicing attorneys. For this reason, we also have constructed an alternative formalism index which excluded the number of steps. This index yielded very similar results. Our results are also robust to using the number of steps, by itself, as a measure of formalism.

Using the technology above, one co-author measured the formalism index in 1950 and compiled a list of all the variables that changed between 1950 and 2000. This list guided us in the review of legislative history of procedural formalism for our two cases. This review helped determine the exact years when provisions were amended or replaced, or wider reforms took place. Another co-author then checked the data using the original sources. When we had trouble understanding the changes, the attorneys who participated in the original questionnaires were contacted for their guidance.

[2] In 1950, our sample includes British colonies of Belize, Botswana, Jamaica, Kenya, Malaysia, Nigeria, South Africa, Tanzania, and Uganda, and French colonies of Morocco, Tunisia, and Senegal; a total of 12.

[3] We retained the case assumptions used in the original 2000 coding. Thus, the case was assumed to take place in the country's largest city in 1950, with the value of the check and of one month's rent being 5 percent of GNP per capita in that year. We faced a few implementation challenges. First, for Tunisia and Senegal, the oldest source of legislation we found was for 1960 and 1965, respectively. For this reason, the formalism index has a few observations missing for Tunisia (1950–1959) and Senegal (1950–1964). Second, in 1950, many African former colonies maintained separate court hierarchies for natives and Europeans. We coded the procedure of the courts for Europeans, since those courts were ultimately used as the model for the entire court system. Third, in some countries, such as the Philippines, the monetary jurisdiction of certain courts was not raised in line with GNP per capita. In this case, unless the actual rules were amended, we keep track of changes in the procedure followed by the court that had jurisdiction at the end of the sample.

[4] For example, whether hearsay evidence is permitted is a question of statute, and does not vary according to practice. By contrast, whether the parties must usually appear at a separate hearing for presenting evidence, in which case it is a separate step, or whether evidence may be presented at the first hearing, in which case it is not, is a question of practice.

II. Divergence

A. *Basic Facts*

Table 1 presents the basic data on legal formalism in 40 countries in 1950 and 2000 used in this paper.[5] Our main findings can be gleaned from this table and the accompanying figures. Figure 1 presents the first finding. Panel A shows the evolution of the 40-country average procedural formalism for tenant eviction between 1950 and 2000, and in panel B, the same average for check collection. The obvious message of Figure 1 is that, for either tenant eviction or check collection, change over the 50-year period has been minimal, at least if we look at world averages. As shown in Table 1, the 40-country average of the ratio of the 2000 to 1950 procedural formalism is 1.01 for tenant eviction, and 1.03 for check collection.

World averages hide much heterogeneity. For check collection, formalism fell (rose) by more than 12 percent (11 percent) in 25 percent of the countries and by more than 26 percent (28 percent) in 10 percent of the countries. For tenant eviction, formalism fell (rose) by more than 12 percent (15 percent) in 25 percent of the countries and by almost 27 percent (28 percent) in 10 percent of the countries.

The central question of this paper is whether procedural formalism has, on average, converged among the legal origins. Figure 2 shows the path of procedural formalism for tenant eviction and check collection (panels A and B, respectively). Panel A reveals four key points. The first two concern the levels of procedural formalism in 2000 and 1950. The second two address changes over time.

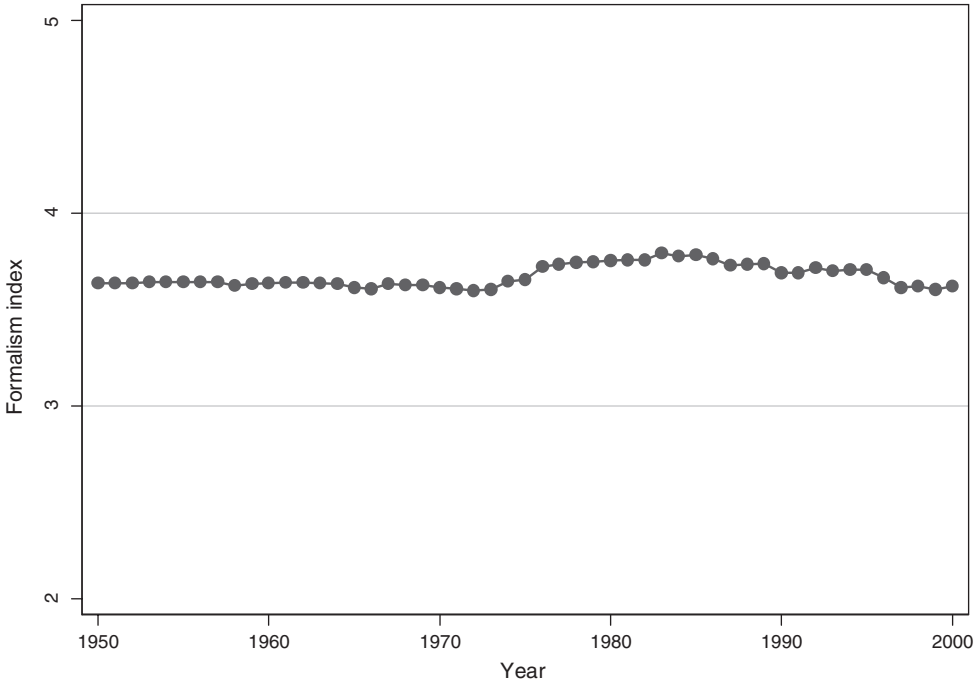
First, as of 2000, civil law countries have a sharply higher average level of procedural formalism for evictions than do common law countries (4.37 versus 2.88), with a t-statistic of 5.91. This result is the same as that in Djankov et al. (2003). Second, the same difference exists, but is slightly less pronounced, in 1950 when the civil law average level of procedural formalism is 4.07, compared to 3.21 for common law countries, with a t-statistic of 3.52 on the difference. This result is crucial, as it shows that differences among legal origins are not merely an artifact of recent data; they were present 50 years ago as well.

Third, panel A of Figure 2 shows that procedural formalism for tenant eviction has, if anything, increased in civil law countries between 1950 and 2000, and declined in the common law countries. Among civil law countries, average of the ratio of 2000 to 1950 procedural formalism is 1.10, which is significantly higher than 1 (t-stat $= 2.11$). Among common law countries, the average of the ratio of 2000 to 1950 procedural formalism is 0.90, which is significantly lower than 1 (t-stat $= 2.44$). Legal origin is a significant predictor of the change in procedural formalism over this 50-year period.

The fourth finding, in panel A of Figure 2, is obviously the consequence of the third, and is our most important one. Over the 50-year period, common and civil law countries diverged in their degree of procedural formalism for evictions.

[5] The formalism index in 2000 in Table 1 incorporates feedback received from Lex-Mundi lawyers and legal scholars since the publication of Djankov et al. (2003). The correlation between the formalism index in Table 1 and that in Djankov et al. (2003) is 0.99.

Panel A. Tenant eviction (*average for all countries*)



Panel B. Check collection (*average for all countries*)

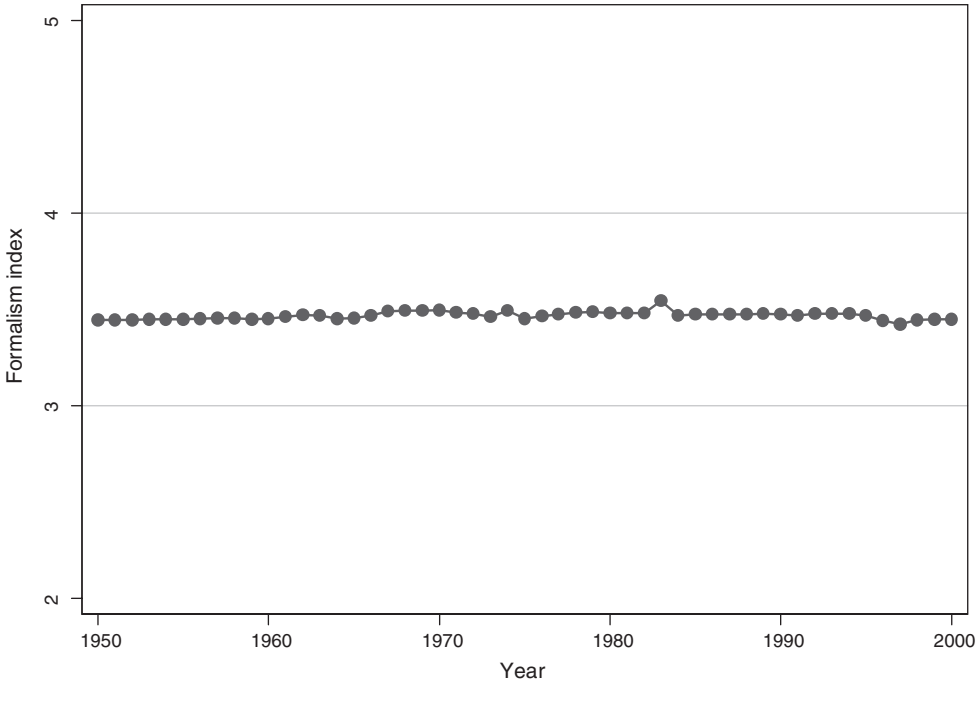
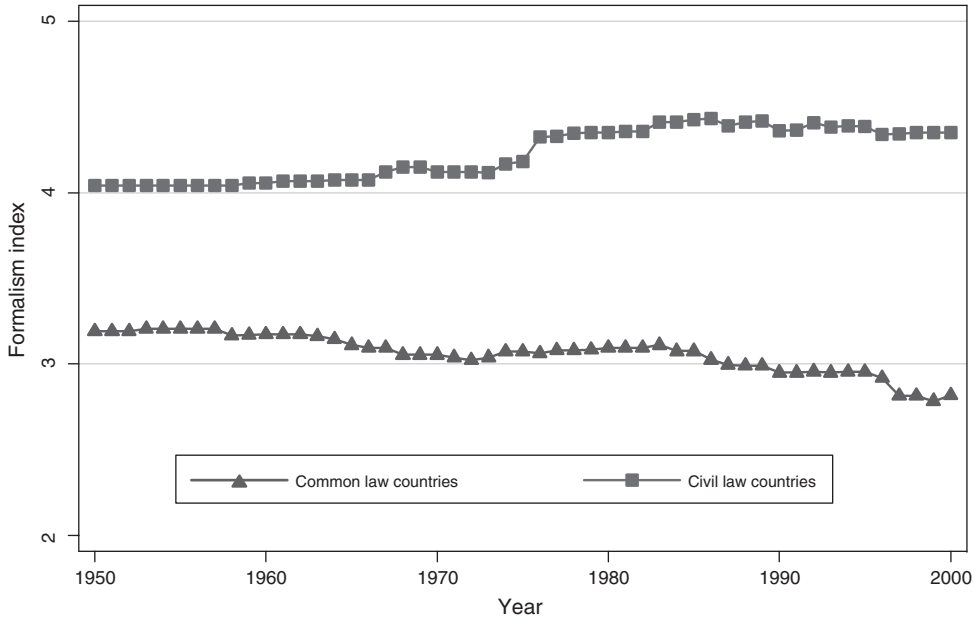


FIGURE 1. EVOLUTION OF FORMALISM (1950–2000)

Panel A. Tenant eviction



Panel B. Check collection

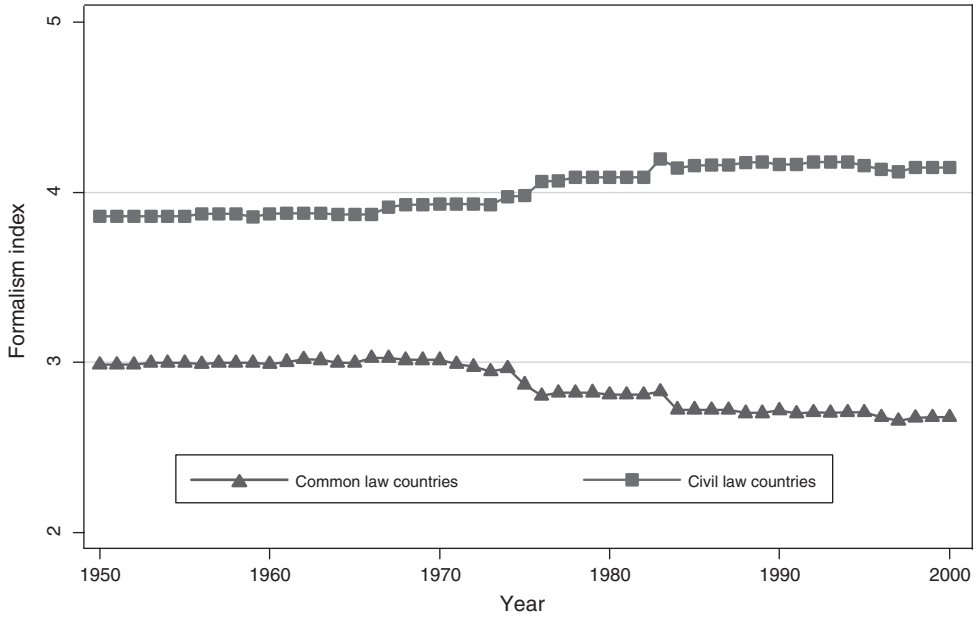


FIGURE 2. EVOLUTION OF FORMALISM ACROSS LEGAL ORIGINS (1950–2000)

Quantitatively, the difference between civil and common law countries in the average ratios of 2000 to 1950 procedural formalism is 0.21, with a *t*-statistic of 3.11. In these data, there is no evidence of convergence among legal origins, and some significant

evidence of divergence. This result is inconsistent with either the hypothesis that legal origins do not matter or the hypothesis that they matter less over time.

Panel B of Figure 2 presents similar results for check collection. In 2000, average procedural formalism is 4.25 in civil law countries and 2.57 in common law ones, with the *t*-statistic of 5.58 on the difference. In 1950, average procedural formalism is 3.92 in civil law countries, compared to 2.92 in common law ones (*t*-stat = 3.46). Procedural formalism increased in the civil law countries, with the average ratio of 2000 to 1950 procedural formalism of 1.14 (*t*-stat on the difference from 1 is 1.89). Procedural formalism declined in common law countries, with the average ratio of 2000 to 1950 formalism of 0.89 (*t*-stat on the difference from 1 is 2.06). Here, as in the case of tenant eviction, we see evidence of divergence between legal origins. The difference between legal origins of the average 2000 to 1950 ratios of procedural formalism is 0.25, with a *t*-statistic of 2.64. In procedural formalism, legal families are moving apart, not closer.

B. *Robustness*

We consider the robustness of the basic findings with respect to three issues: additional controls, possibly different patterns in the rich and the poor countries, and the evolution of different aspects of legal procedure. First, one might raise the concern that in comparing formalism we merely look at legal origins, with no additional controls. To address this concern, Table 2 examines the cross-sectional determinants of procedural formalism in a regression format (for both disputes together, and taken separately), but controls not just for legal origins, but also for per capita income in the relevant year. Table 2 confirms that, for both disputes, there are substantial differences among legal origins in procedural formalism in both 1950 and 2000. In a pooled regression, the parameter estimates for 1950 (respectively 2000) imply that a one-standard deviation increase in log income per capita is associated with a 0.28 (respectively 0.37) reduction in formalism. The effect of income per capita on formalism is modest compared with the -1.07 and -1.82 coefficients for common law in 1950 and 2000, respectively. It takes four standard deviations of log per capita income (e.g., from Botswana to the United States in 1950 and from Tanzania to the United States in 2000) to cut formalism as much as the move from civil to common law.

A second issue raised by this analysis is that, by pooling all countries within each legal tradition, we ignore the possibility that convergence patterns between legal origins differ within poor and rich country subsamples. After all, when comparative legal scholars discuss convergence, they tend to emphasize the rich countries.

Panels A and B of Figure 3 show the evolution of procedural formalism for tenant eviction, in each legal origin, for countries with 1950 income per capita above and below $2,000 ("rich" and "poor" countries), respectively.[6] Figure 4 presents similar results for check collection. The results reveal no evidence of convergence among either the rich or the poor countries. This result is inconsistent with the view that the

[6] In units of 1990 international dollars, the world mean income per capita in 1950 was roughly $2,400. Alternative income-per-capita cutoffs produce similar results.

TABLE 2—CROSS-SECTIONAL DETERMINANTS OF PROCEDURAL FORMALISM

	Dependent variable: formalism index 1950			Dependent variable: formalism index 2000		
	All observations (clustered)	Eviction of a tenant	Collection of a check	All observations (clustered)	Eviction of a tenant	Collection of a check
Log GDP per capita in 1950	−0.2756** (0.122)	−0.2152* (0.122)	−0.3360** (0.135)			
Log GDP per capita in 2000				−0.3685*** (0.086)	−0.2185** (0.107)	−0.5186*** (0.0938)
Common law dummy	−1.0681*** (0.229)	−0.9703*** (0.221)	−1.1659*** (0.262)	−1.8171*** (0.214)	−1.6260*** (0.246)	−2.0082*** (0.251)
Constant	6.1830*** (0.924)	5.7788*** (0.904)	6.5873*** (1.046)	7.7044*** (0.810)	6.3827*** (0.992)	9.0261*** (0.880)
Observations	80	40	40	80	40	40
R^2	0.30	0.29	0.32	0.58	0.53	0.66

Notes: The table shows OLS regressions with clustered or robust standard errors for the cross-section of countries. The dependent variables are the formalism index in 1950 and in 2000. In the first and fourth regressions, we pool the observations for the cases of eviction of a tenant and check collection, and report standard errors clustered at the country level. Robust standard errors are shown in parentheses. All variables are described in the Appendix.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

rich countries are converging and losing their legal identities because of globalization or European Union policies. Even for these countries, the story is divergence.

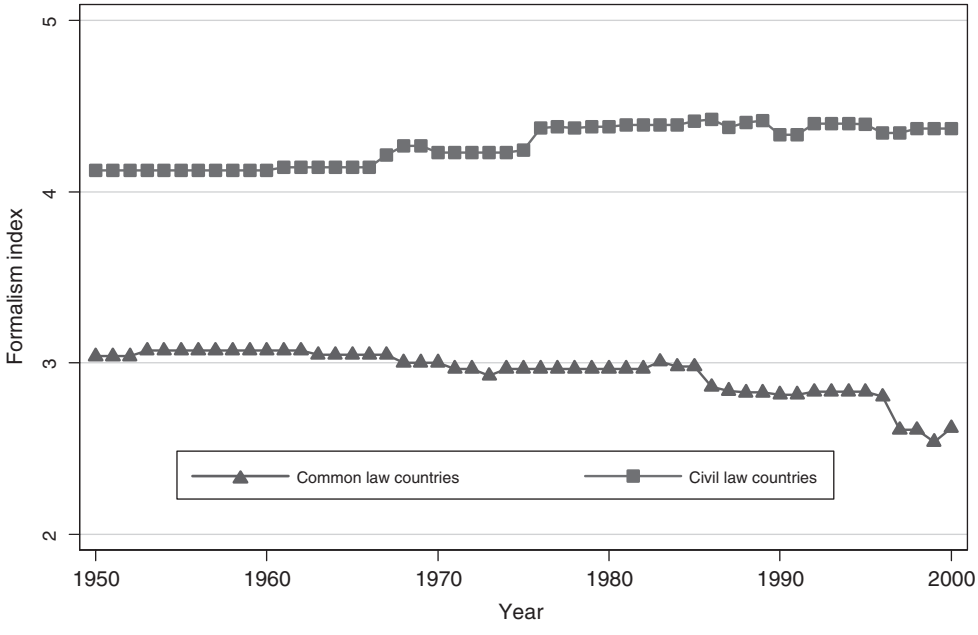
A third question is whether divergence is pervasive across the components of the formalism index or is specific to one or two dimensions. Table 3 addresses this question for eviction and check collection separately. Formalism increased in civil law countries along most dimensions, while it declined, or increased much less, in common law countries. This is true for professionals versus laymen, for written versus oral presentation of the evidence, for requirement of legal justification, for engagement formalities, and for steps. This pattern does not hold for statutory regulation of evidence and for the control of superior review, although here the differences across legal origins are not statistically significant.[7] Our finding of divergence is not a figment of data construction.

C. *An Interpretation*

The evidence shows that, at least in the area of legal procedures governing the adjudication of simple disputes, there has been no convergence among different legal families during 1950–2000. The differences among families existed in 1950, and have widened by 2000. At least for simple disputes, this evidence rejects the view

[7] Our findings are also consistent with observations of legal scholars who see a trend toward the erosion of orality and hearsay rule in the proceedings, an increase in the judicial control of the process, and simplification of the appeals process and superior review (Schlesinger et al. 1998, Zuckerman 1999, Markesinis 1994, and Del Duca 2007).

Panel A. High GDP per capita countries in 1950



Panel B. Low GDP per capita countries in 1950

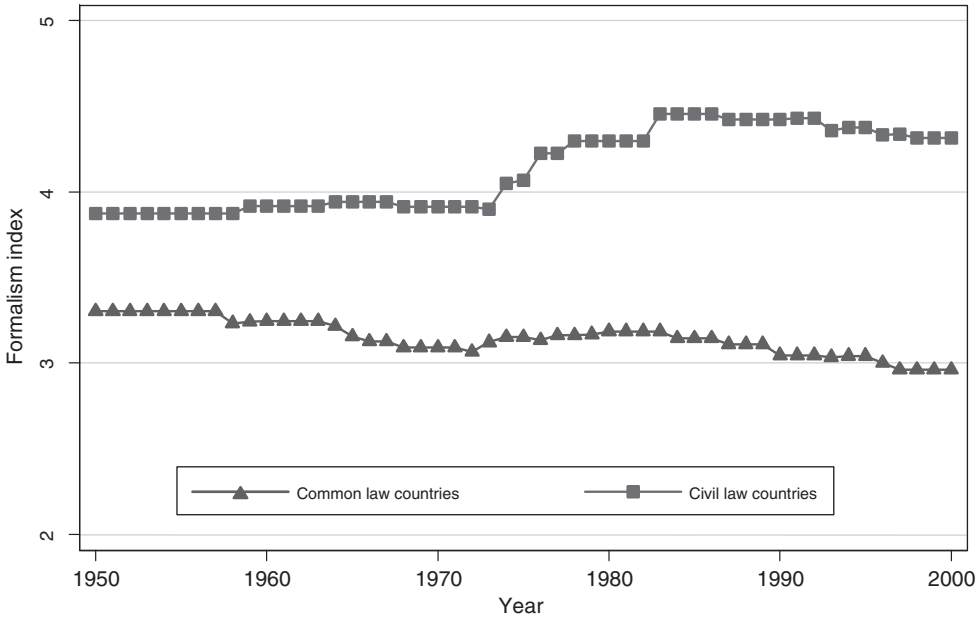
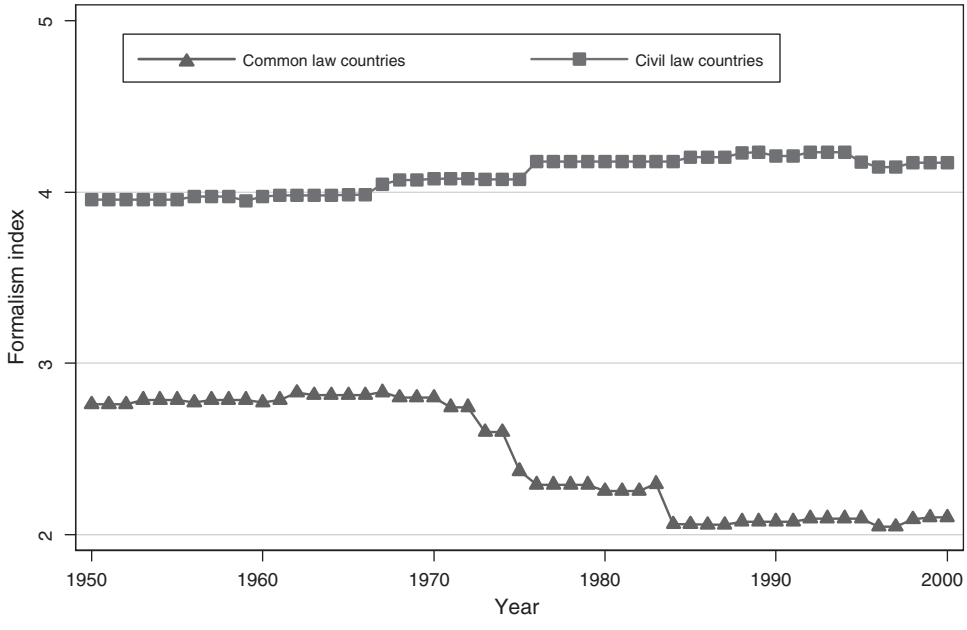


FIGURE 3. EVOLUTION OF FORMALISM BY INCOME LEVEL

(*Tenant eviction 1950–2000*)

Panel A. High GDP per capita countries in 1950



Panel B. Low GDP per capita countries in 1950

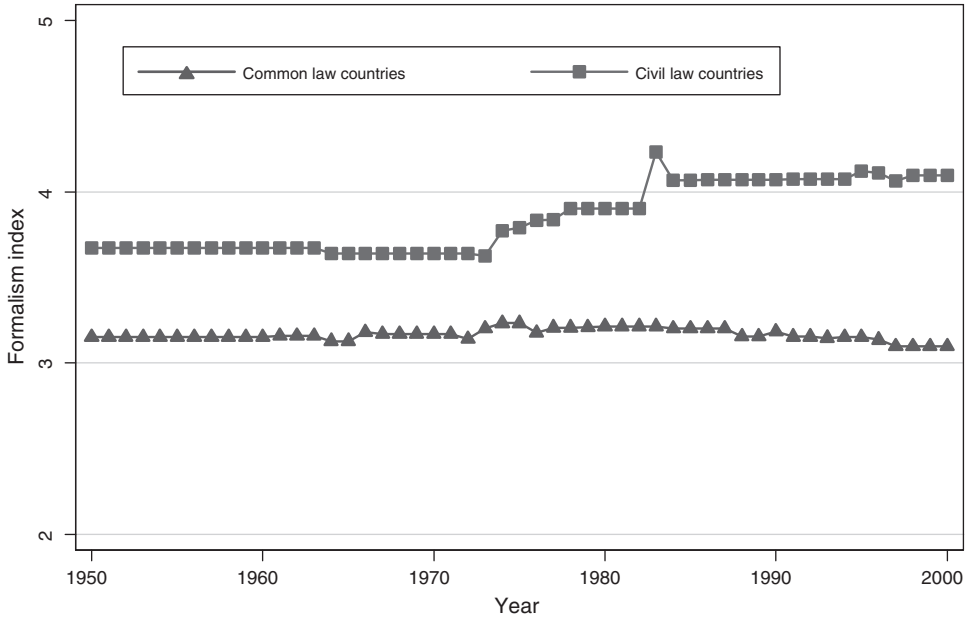


FIGURE 4. EVOLUTION OF FORMALISM BY INCOME LEVEL

(*Check collection 1950–2000*)

Table 3—Formalism Index and Its Components between 1950 and 2000

Change from 1950 to 2000 = (2000 subindex) − (1950 subindex)								
	Professional versus laymen	Written versus oral	Legal justification	Statutory regulation of evidence	Control of superior review	Engagement formalities	Independent procedural actions (steps)	Formalism index
Panel A. Eviction of a nonpaying tenant								
Mean change								
Common law	−0.19	0.04	0.06	−0.03	−0.02	−0.07	−0.11	−0.32
Civil law	0.06	0.16	0.09	−0.01	−0.02	0.03	2.91	0.30
All countries	−0.05	0.10	0.07	−0.02	−0.02	−0.02	1.55	0.02
Tests of means (*t*-stats)								
Civil law versus common law	3.22	2.63	0.50	0.65	0.08	2.03	2.23	2.94
Panel B. Collection of a check								
Mean change								
Civil law	−0.13	0.00	−0.02	−0.03	0.02	−0.13	−1.17	−0.35
Common law	0.03	0.16	0.12	−0.03	−0.02	0.02	2.82	0.33
All countries	−0.04	0.09	0.06	−0.03	0.00	−0.05	1.03	0.02
Tests of means (*t*-stats)								
Common law versus civil law	1.70	2.70	1.82	−0.02	−0.44	2.52	2.79	2.65

Notes: This table classifies countries by legal origin and shows the change from 1950 to 2000 for each of the seven components of the formalism index and the overall aggregate formalism index with steps. Panel A shows the change in each subindex for the case of the eviction of a nonpaying residential tenant. Panel B shows the change for the case of check collection. The change for each subindex, in each country, is calculated as the subindex in 2000 minus the subindex in the year 1950. The table only shows the average of these changes across legal origins and for the complete sample of 40 countries. Finally, the bottom of each panel shows the *t*-statistics for the test of difference in means between common and civil law countries in our sample. All variables are described in the Appendix.

that the influence of legal origins on legal procedure is a *fin-de-siecle* phenomenon. Moreover, for small disputes, this evidence also strongly rejects the view that globalization is quickly eroding the effect of legal origin on legal procedure.

One might wonder what is going on, especially in light of the often articulated view that there is convergence. A closer examination of a few cases (summarized in our working paper, Balas et al. 2008) suggests a possible narrative. After World War II, many countries experienced an explosion in civil litigation, in part, because of rapid economic growth. Their systems of civil litigation came under significant pressure, sometimes described as a crisis, which expressed itself in delays and perceived arbitrariness, and unfairness of the civil justice system (Zuckerman 1999). This perceived crisis engendered reforms.

But these reforms took different forms in common and civil law countries. Specifically, the French civil law countries appear to have been unifying their court systems, and eliminating informal courts, thus assuring greater consistency and uniformity. In contrast, the common law countries were doing the opposite—creating specialized, less formal courts designed to resolve the small disputes. These

differences in reform styles had the effect of raising procedural formalism in the civil law countries, and reducing it in the common law countries, consistent with our findings.

The contrast between the two mother countries, France and England, illustrates these differences. From the time of its revolution to 1958, France had two venues for addressing small disputes: the informal arbitration courts run by *juges de paix*, and the *tribunaux civils*, which were formal civil courts subject to highly formalized civil procedures. Because our cases would normally go to *juges de paix,* the formalism indices for France, as of 1950, are extremely low. (Most countries in the civil law tradition did not have this informal alternative, which was a contribution of the revolution that survived Napoleonic reforms.) However, in 1958, and then in 1977, France undertook civil justice reforms unifying its court systems, standardizing the procedures (and thus eliminating the distinctions between large and small claims), and shutting down numerous courts including the system of *juges de paix*. The idea was to save money as well as to improve the administration of justice through uniformity of procedures. One consequence was to more than double the formalism indices.[8]

Britain faced similar problems in the post-war era, but reacted differently. Although Britain simplified its civil procedures at several points in the nineteenth century, it actually inherited from the nineteenth century a more cumbersome set of procedures than the French *juges de paix* system. But in the 1960s and 1970s, the country undertook a number of reforms aiming to reduce the complexity and duration of civil suits. In the 1980s, further reforms greatly expanded the scope for arbitration. In 1999, Britain adopted new Civil Procedure Rules, which introduced a small claims track for low-level disputes, raised the monetary limit for small claims, and allowed for a variety of alternative dispute resolution methods. As a consequence, procedural formalism in England was significantly lower in 2000 than it was in 1950.

The story of increased regulation of procedure in civil law countries, and deregulation in the common law countries, is consistent with the broader narrative of how these legal traditions respond to crises (La Porta et al. 2008). The narrative is surely an oversimplification, as the diversity of reforms illustrates. Yet it might shed light on the divergence of procedural formalism despite both the informal forces of globalization and the more formal forces of harmonization emphasized by legal scholars.

III. Determinants of Legal Evolution

In this section, we revisit the evidence of divergence from a different perspective, by asking what initial country characteristics determine the evolution of procedural formalism. Based on the previous section, legal origin is one candidate. But there are others, such as the level of economic development, education, political structure, and the political orientation of government. Here, we evaluate these other determinants.

[8] In contrast, the adjudication of complex disputes probably got simpler, consistent with the intention of the reformers (Loïc Cadiet 1999).

Richer countries may undertake more legal reforms than poorer ones, perhaps because the efficient administration of justice is a normal good (Harold Demsetz 1967; La Porta et al. 1999). Although this theory does not predict the direction of change in formalism, we saw, in Figures 3 and 4, that the decline in formalism for common law countries was concentrated among the rich countries. However, the increase in formalism was slightly higher in the poor civil law countries than it was in the rich ones.

Economists have also proposed a set of arguments, not necessarily related to procedure, which hold that it is the political factors, rather than the structure of the legal system or the level of development, that influence legal evolution. For example, democracy or constraints on the executive might matter. It is not *prima facie* clear whether, for our simple disputes, the median voter wants more formalism (as he is more likely to be a debtor) or less formalism (as he benefits from more efficient contract enforcement). In any event, we can check what the data say. Also, we can check whether leftist politics had an influence on the evolution of legal procedure. For example, one might argue that leftist politics should lead to more formalism as the government seeks to curtail, through regulation of procedure, the ability of the more powerful litigants to sway the courts in their favor (Glaeser and Shleifer 2003).

In all the specifications that follow, we try to explain legal evolution. Accordingly, the dependent variable is the ratio of 2000 to 1950 procedural formalism. In all specifications, we control for the initial procedural formalism to take into account possible mean reversion. We present the results for each dispute separately, but also pool the data for tenant eviction and check collection, and correct standard errors by appropriately clustering at the country level.

In Table 4, we consider how legal origins, initial level of economic development, or initial education influence the evolution of procedure. First, we have some evidence of mean reversion: initial formalism reduces the ratio. Second, richer countries, on average, reduced procedural formalism, holding legal origins constant. The same result holds for initial level of education (we cannot disentangle 1950 income from 1960 years of schooling). Richer or more educated countries reduced procedural formalism.

Third, we confirm the result of Section II, that common law countries, other things equal, reduced procedural formalism. Compared to civil law countries, depending on the specification, the ratio is a striking 0.32 to 0.51 lower, and the effect is strongly significant. Divergence remains a robust message of the paper.

In Table 5, we include, one at a time, four political variables: two measures of democracy (the first being average democracy, the second being a stricter indicator of consistent perfect democracy; see the Appendix), average constraints on the executive, and a measure of average leftist orientation of governments, which we have for the 1975–1995 period from Juan C. Botero et al. (2004). Democracies and countries with more constrained executives reduced procedural formalism. A possible explanation is that, in democracies, the median voter sought to improve his access to courts. However, these results do not survive the inclusion of initial income as a control (results not reported). There is no evidence that leftist governments increased formalism. We have tried other political variables, such as proportional representation, divided government, union density, and leftist orientation of government since

TABLE 4—EVOLUTION OF PROCEDURAL FORMALISM: INITIAL INCOME, INITIAL EDUCATION, AND LEGAL ORIGINS

	Dependent variable: formalism index 2000/formalism index 1950					
	All observations (clustered)	Eviction of a tenant	Collection of a check	All observations (clustered)	Eviction of a tenant	Collection of a check
Formalism index 1950	−0.1669***	−0.1308**	−0.2009***	−0.1845***	−0.1433**	−0.2245***
	(0.058)	(0.0492)	(0.0700)	(0.064)	(0.0561)	(0.0778)
Log GDP per capita in 1950	−0.07492**	−0.05242	−0.1010**			
	(0.036)	(0.0356)	(0.0462)			
Years of schooling in 1960				−0.02896**	−0.02465*	−0.03513**
				(0.014)	(0.0137)	(0.0166)
Common law dummy	−0.4227***	−0.3436***	−0.5062***	−0.4057***	−0.3235***	−0.4925***
	(0.101)	(0.0800)	(0.137)	(0.102)	(0.0837)	(0.137)
Constant	2.3837***	2.0515***	2.7305***	1.9795***	1.7892***	2.1672***
	(0.451)	(0.387)	(0.576)	(0.331)	(0.290)	(0.398)
Observations	80	40	40	72	36	36
R^2	0.40	0.39	0.44	0.41	0.39	0.45

Notes: The table shows OLS regressions with clustered or robust standard errors for the cross-section of countries. The dependent variable is the ratio of the formalism index in 2000 over the formalism index in 1950. In the first and the fourth regressions, we pool the observations for the cases of eviction of a tenant and check collection, and report standard errors clustered at the country level. Robust standard errors are shown in parentheses. All variables are described in the Appendix.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

1924, with no significant results. In our data, divergence is driven by legal origins, with other factors playing, at best, a secondary role.

IV. Conclusion

We found that legal procedures of common and civil law countries governing the resolution of simple disputes differed sharply in 1950 and have diverged further by 2000. The particular disputes we considered are eviction of a nonpaying tenant and the collection of a bounced check. We looked at 40 countries. And, we used a particular index of legal procedure, the "formalism index" of Djankov et al. (2003), which measures how tightly the law regulates the civil procedure itself.

The finding is inconsistent with the hypothesis that differences in legal procedure between legal families only existed at the end of the twentieth century; they are clearly more permanent. The data also rejects the hypothesis that legal families are exhibiting formal convergence in civil procedures. Indeed, we find divergence between families both in the whole 40-country sample, and in the rich and poor country subsamples. At least for this area of law, then, the data are most consistent with the proposition that legal origins exert long-lasting influence on national legal rules.

We have suggested one interpretation of this evidence consistent with some historical accounts. At the beginning of our sample, there is significant dissatisfaction with civil procedure in many countries of our sample. Access to justice is limited,

Table 5—Evolution of Procedural Formalism: Politics and Legal Origins

Dependent variable: formalism index 2000/formalism index 1950				
Formalism index 1950	−0.1684***	−0.1860***	−0.1654***	−0.1546***
	(0.060)	(0.062)	(0.059)	(0.057)
Common law dummy	−0.3654***	−0.3735***	−0.3476***	−0.4085***
	(0.094)	(0.096)	(0.090)	(0.099)
Democracy (1950–2000)	−0.01655*			
	(0.009)			
Democracy dummy		−0.1438*		
		(0.072)		
Executive constraints (1950–2000)			−0.03249*	
			(0.019)	
Left/center government (1975–1995)				0.1037
				(0.077)
Constant	1.8930***	1.9181***	1.9394***	1.7011***
	(0.293)	(0.291)	(0.321)	(0.253)
Observations	76	76	76	76
R^2	0.43	0.44	0.43	0.40

Notes: The table shows OLS regressions with clustered standard errors for the cross-section of countries. The dependent variable is the ratio of the formalism index in 2000 over the formalism index in 1950. We pool the observations for the cases of eviction of a tenant and check collection, and report standard errors clustered at the country level. Robust standard errors are shown in parentheses. All variables are described in the Appendix.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

while the administration of justice is cumbersome and expensive. Yet countries react to this set of similar problems in radically different ways. Civil law countries, such as Mexico and France, unify their systems of civil justice, standardize procedure, and reduce the number of judges. The effect is to raise procedural formalism because the more streamlined channels are eliminated. Common law countries, actually led by New Zealand and Australia and *followed* by England, react to similar problems by creating cheaper and less formal mechanisms of resolving disputes, thereby reducing formalism. The suggested hypothesis is that an important difference between legal systems might be in how they react to problems. La Porta et al. (2008) push this hypothesis further. The data presented here might be part of a broader story.

At a broader level, this paper contributes to one of the most active areas of research on, and criticism of, legal origins theory, namely the evolution of laws and regulations over time. Various authors have argued that, in specific countries and specific spheres, civil law was historically less interventionist, or more protective of investors, than common law (e.g., Raghuram G. Rajan and Luigi Zingales 2003; Naomi R. Lamoreaux and Jean-Laurent Rosenthal 2005; Jérôme Sgard 2006; and Aldo Mussacchio 2008). The implication is that the legal origins facts are largely a late twentieth century phenomenon. La Porta et al. (2008) reply to some of the critics, and this paper provides further evidence against the critics view, but the historical debate remains wide open.

Because these issues have not yet been sorted out, they caution against over-generalizing our findings. We only start in 1950, and do not have much to say about more distant history. Our sample covered simple disputes. Even with respect to legal

procedure, the findings might be different for complex ones. Globalization and other forces of integration might bear relatively more strongly on substantive areas of law than they do on procedure. Finally, as argued by corporate law scholars, countries might exhibit substantive convergence in their legal rules without formal convergence (although it is not clear how this point would apply to procedure). Yet, despite all these valid reservations, this paper has presented the first bit of systematic evidence against legal convergence for 40 countries over a 50-year horizon.

Appendix: Description of the variables

This table describes, in detail, all the variables in the paper and provides their sources.

Variable	Description
Economic variables	
Log GDP per capita	Logarithm of gross domestic product (GDP) per capita in units of international Geary-Khamis dollars of 1990. *Source:* Maddison (2003).
Common law dummy	Equals one if the legal origin of the company law or commercial code of the country is common law (i.e., English legal origin), and zero if the legal origin is civil law (i.e., French, Socialist, German, and Scandinavian legal origins). *Source:* La Porta et al. (1999, 2008).
Years of schooling in 1960	Average years of schooling in 1960 of the total population over 25 years of age. *Source:* Robert J. Barro and Jong-Wha Lee (2000), International Data on Educational Attainment: Updates and Implications. *Source:* Barro and Lee (2000). Data posted on http://www.cid.harvard.edu/ciddata/ciddata.html.
Democracy	A measure of the degree of democracy in a given country based on: (1) the competitiveness of political participation; (2) the openness and competitiveness of executive recruitment; and (3) the constraints on the chief executive. The variable ranges from zero to ten, where higher values mean a higher degree of institutionalized democracy. This variable is calculated as the average from 1950–2000. *Source:* Keith Jaggers and Monty G. Marshall (2000) and updates.
Democracy dummy	Equals one if democracy is higher than eight, and zero otherwise. Under this definition, the democracy dummy equals one for: Botswana, Canada, France, Germany, India, Italy, Jamaica, Japan, Netherlands, New Zealand, Sweden, the United States, and the United Kingdom. The data source does not include data for Belize and Hong Kong, so we have assigned a missing value for these two countries. *Source:* Own construction based on data from Jaggers and Marshall (2000) and updates.
Executive constraints	A measure of the extent of institutionalized constraints on the decision making power of chief executives. The variable takes seven different values: (1) Unlimited authority (there are no regular limitations on the executive's actions, as distinct from irregular limitations such as the threat or actuality of coups and assassinations); (2) Intermediate category; (3) Slight to moderate limitation on executive authority (there are some real but limited restraints on the executive); (4) Intermediate category; (5) Substantial limitations on executive authority (the executive has more effective authority than any accountability group but is subject to substantial constraints by them); (6) Intermediate category; (7) Executive parity or subordination (accountability groups have effective authority equal to or greater than the executive in most areas of activity). This variable ranges from one to seven, where higher values equal a greater extent of institutionalized constraints on the power of chief executives. This variable is calculated as the average from 1950–2000. *Source:* Jaggers and Marshall (2000) and updates.

Variable	Description
Left/center government	Percentage of year between 1975 and 1995, during which both the party of the chief executive and largest party in congress have left or center political orientation. If the country was not independent in 1975, the initial year of the period, we use the independence year as the first period. For countries that were part of a larger country in 1975, we include the political orientation of the political parties in the mother country in the pre-breakup period. In the case of military regimes, where political affiliations are unclear, we classify the regime based on its policies. *Source:* Botero et al. (2004).
Formalism index	
Formalism index	Index of substantive and procedural statutory intervention in judicial cases at lower-level civil trial courts for each year between 1950 and 2000. The index is calculated separately for the eviction of a nonpaying tenant and for the collection of a bounced check. The index is formed, as in Djankov et al. (2003), by adding up the following components: (i) professionals versus laymen; (ii) written versus oral elements; (iii) legal justification; (iv) statutory regulation of evidence; (v) control of superior review; (vi) engagement formalities; and (vii) independent procedural actions. The index ranges from zero to seven, where a higher value means a higher level of control or intervention in the judicial process. Some of the components of the index are defined differently than in Djankov et al. (2003). For this reason, we provide the revised definition of the components of the index below. *Source:* Authors' own calculations based on Djankov et al. (2003).
Components of the formalism index: professionals versus laymen	
General jurisdiction court	The variable measures whether a court of general or of limited jurisdiction would be chosen or assigned to hear the case under normal circumstances. It equals one for a court of general jurisdiction, and zero otherwise. We define a court of general jurisdiction as a state institution, recognized by the law as part of the regular court system, generally competent to hear and decide regular civil or criminal cases. A limited jurisdiction court would hear and decide only some types of civil cases. Specialized debt-collection or housing courts, small-claims courts, and arbitrators or justices of the peace are examples. Specialized courts typically, but not always, have simpler and faster procedures.
Professional versus nonprofessional judge	Equals one if the judge (or members of the court or tribunal) are professionals, and zero otherwise. A professional judge is one who has undergone complete professional training as required by law, and whose primary activity is to act as judge or member of a court. A nonprofessional judge is an arbitrator, administrative officer, practicing attorney, merchant, or any other layperson who may be authorized to hear and decide the case.
Legal representation is mandatory	Equals one if legal representation by a licensed attorney is mandatory and zero otherwise.
Index: professionals versus laymen	The index measures whether the resolution of the case relies on the work of professional judges and attorneys, as opposed to other types of adjudicators, and lay people. The index is the normalized sum of: (i) general jurisdiction court; (ii) professional versus nonprofessional judge; and (iii) legal representation is mandatory. The index ranges from zero to one, where higher values mean more participation by professionals.
Components of the formalism index: written versus oral	
Filing	Equals one if the complaint is normally submitted in written form to the court, and zero otherwise.
Service of process	Equals one if the defendant's first official notice of the complaint is most likely received in writing, and zero otherwise.
Opposition	Equals one if, under normal circumstances, the defendant's answer to the complaint is normally submitted in writing, and zero otherwise.
Evidence	Equals one if most of the evidence, including documentary evidence, is submitted to the court in written form, in the form of attachments, affidavits, or other written documents, and zero otherwise.
Final arguments	Equals one if final arguments on the case are normally submitted in writing, and zero otherwise.

Variable	Description
Judgment	Equals one if, normally, the parties receive an official notification of the final decision in written form, by notice mailed to them, publication in a court board or gazette, or through any other written means, and zero otherwise.
Notification of judgment	Equals one if, normally, the parties receive their first notice of the final decision in written form, by notice mailed to them, publication in a court board or gazette, or through any other written means, and zero otherwise.
Enforcement of judgment	Equals one if the enforcement procedure is mostly carried out through the written court orders or written acts by the enforcement authority, and zero otherwise.
Index: written versus oral elements	The index measures the written or oral nature of the actions involved in the procedure, from the filing of the complaint to the actual enforcement. The index is calculated as the number of stages, carried out mostly in written form, over the total number of applicable stages, and it ranges from zero to one, where higher values mean higher prevalence of written elements.
Components of the formalism index: legal justification	
Complaint must be legally justified	The variable measures whether the complaint is required, by law or usual court practice, to include references to the applicable laws, legal reasoning, or formalities beyond a simple statement of the particulars of claim. Equals one for a legally justified complaint, and zero when the complaint does not ordinarily require legal justification (specific articles of the law, case-law, etc.).
Judgment must be legally justified	The variable measures whether the judgment is normally expected to expressly state the legal justification (articles of the law, case-law, etc.) for the decision. Equals one for a legally justified judgment, and zero otherwise.
Judgment must be on law (not on equity)	Equals one if the judgment is normally motivated and founded on the law, and zero otherwise.
Index: legal justification	The index measures the level of legal justification required in the process. The index is formed by the normalized sum of: (i) complaint must be legally justified; (ii) judgment must be legally justified; and (iii) judgment must be on law (not on equity). The index ranges from zero to one, where higher values mean a higher use of legal language or justification.
Components of the formalism index: statutory regulation of evidence	
Judge cannot introduce evidence	Equals one if, by law, the judge cannot freely request or take evidence that has not been requested, offered, or introduced by the parties, and zero otherwise.
Judge cannot reject irrelevant evidence	Equals one if, by law, the judge cannot refuse to collect or admit evidence requested by the parties, even if she deems it irrelevant to the case, and zero otherwise.
Out-of-court statements are inadmissible	Equals one if statements of fact that were not directly known or perceived by the witness, but only heard from a third person, may not be admitted as evidence, and zero otherwise.
Mandatory pre-qualification of questions	Equals one if, by law, the judge must pre-qualify the questions before they are asked of the witnesses, and zero otherwise.
Oral interrogation only by judge	Equals one if, by law, parties and witnesses can only be orally interrogated by the judge, and zero otherwise.
Only original documents and certified copies are admissible	Equals one if, by law, only original documents and "authentic" or "certified" copies are admissible documentary evidence, and zero otherwise.
Authenticity and weight of evidence defined by law	Equals one if the authenticity and probative value of documentary evidence is specifically defined by the law, and zero if all admissible documentary evidence is freely weighted by the judge.
Mandatory recording of evidence	Equals one if, by law, there must be a written or magnetic record of all evidence introduced at trial, and zero otherwise.

Variable	Description
Index: statutory regulation of evidence	The index measures the level of statutory control or intervention of the administration, admissibility, evaluation, and recording of evidence. The index is formed by the normalized sum of the following variables: (i) judge cannot introduce evidence; (ii) judge cannot reject irrelevant evidence; (iii) out-of-court statements are inadmissible; (iv) mandatory pre-qualification of questions; (v) oral interrogation only by judge; (vi) only original documents and certified copies are admissible; (vii) authenticity and weight of evidence defined by law; and (viii) mandatory recording of evidence. The index ranges from zero to one, where higher values mean a higher statutory control or intervention.
Components of the formalism index: control of superior review	
Enforcement of judgment is automatically suspended until resolution of the appeal	Equals one if the enforcement of judgment is automatically suspended until resolution of the appeal, when a request for appeal is granted, and zero otherwise.
Comprehensive review in appeal	Equals one if issues of both law and fact (evidence) can be reviewed by the appellate court, and zero otherwise.
Interlocutory appeals are allowed	Equals one if interlocutory appeals are allowed, and zero otherwise. Interlocutory appeals are defined as appeals against interlocutory or interim judicial decisions made during the course of a judicial proceeding, in first instance, and before the final ruling on the entire case.
Index: control of superior review	The index measures the level of control or intervention of the appellate court's review of the first-instance judgment. The index is formed by the normalized sum of the following variables: (i) enforcement of judgment is automatically suspended until resolution of appeal; (ii) comprehensive review in appeal; and (iii) interlocutory appeals are allowed. The index ranges from zero to one, where higher values mean higher control or intervention.
Components of the formalism index: engagement formalities	
Mandatory pre-trial conciliation	Equals one if the law requires the plaintiff to attempt a pre-trial conciliation or mediation before filing the lawsuit, and zero otherwise.
Service of process by judicial officer required	Equals one if the law requires the complaint to be served to the defendant by a judicial officer, and zero otherwise.
Notification of judgment by judicial officer required	Equals one if the law requires the judgment to be notified to the defendant by a judicial officer, and zero otherwise.
Index: engagement formalities	The index measures the formalities required to engage someone in the procedure or to hold him/her accountable of the judgment. The index is formed by the normalized sum of the following variables: (i) mandatory pre-trial conciliation; (ii) service of process by judicial officer required; and (iii) notification of judgment by judicial officer required. The index ranges from zero to one, where higher values mean a higher statutory control or intervention in the judicial process.
Components of the formalism index: independent procedural actions	
Filing and service	The total minimum number of independent procedural actions required to complete filing, admission, attachment, and service.
Trial and judgment	The total minimum number of independent procedural actions required to complete opposition to the complaint, hearing or trial, evidence, final arguments, and judgment.
Enforcement	The total minimum number of independent procedural actions required to complete notification and enforcement of judgment.

Variable	Description
Index: independent procedural actions	An independent procedural action is defined as a step of the procedure, mandated by law or court regulation, that demands interaction between the parties or between them and the judge or court officer (e.g., filing a motion, attending a hearing, mailing a letter, or seizing some goods). We also count as an independent procedural action every judicial or administrative writ, resolution or action (e.g., issuing judgment or entering a writ of execution) which is legally required to advance the proceedings until the enforcement of judgment. Actions are always assumed to be simultaneous, if possible, so procedural events that may be fulfilled in the same day and place are only counted as one action or step. To form the index, we: (1) add the minimum number of independent procedural actions required to complete all the stages of the process (from filing of lawsuit to enforcement of judgment); and (2) normalize this number to fall between zero and one using the minimum and the maximum number of independent procedural actions among the countries in the sample. The index ranges from zero to one, where higher values are associated with more procedural actions.

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