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Do Legal Origins Predict Legal Substance?

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Abstract

There is a large body of research in economics and law suggesting that the legal origin of a country—that is, whether its legal regime is based on English common law or French, German, or Nordic civil law—profoundly impacts a range of outcomes. However, the exact relationship between legal origin and legal substance has been disputed in the literature and not fully explored with nuanced legal coding. We revisit this debate while leveraging novel cross-country data sets that provide detailed coding of two areas of laws: property and antitrust. We find that having shared legal origins strongly predicts whether countries have similar property regimes but does little to predict whether countries have similar antitrust regimes. Our results suggest that legal origin may be an important predictor of legal substance in well-established legal regimes but does little to explain substantive variation in more recent areas of law.

1. Introduction

Most countries' legal systems can be traced to a handful of models, such as English common law or French civil law. An extensive body of research in economics and law suggests that the legal model a country follows—known as its legal origin—has profound long-run effects on a number of economic, political, and social outcomes. These outcomes range from growth in gross domestic product (GDP) per capita (Mahoney 2001), to the use of military conscription (Mulligan

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and Shleifer 2005a, 2005b), to transmission rates of HIV (Anderson 2018), to climate change policies (Fredriksson and Wollscheid 2015), to criminal incarceration (D'Amico and Williamson 2015), and to judicial decisions (Zhang, Liu, and Garoupa 2018).

The start of the so-called legal origins literature is widely credited to four scholars—Rafael La Porta, Florencio López-de-Silanes, Andre Shleifer, and Robert Vishny—jointly known as LLSV (La Porta et al. 1997, 1998). They study cross-country differences in financial development and document significant variance in the legal protections that different countries afford to investors. According to LLSV, much of this variance can be traced to countries' legal origins, with common-law countries providing more extensive investor protections than civil-law countries. This relationship led La Porta, López-de-Silanes, and Shleifer (2008, p. 326) to conclude that "legal rules and regulations differ systematically across countries, and . . . these differences in legal rules and regulations are accounted for to a significant extent by legal origins."

The research by LLSV launched an influential literature examining the significance of legal origins (Mahoney 2001; Dam 2006; Roe 2006; La Porta, López-de-Silanes, and Shleifer 2008; Oto-Peralías and Romero-Ávila 2017). This research shows that legal origins are correlated with aspects of countries' legal systems like property rights and judicial independence and that those differences are in turn correlated with greater economic growth (Anderson 2018, p. 1411). But this literature has also been highly contested in academic debates. For instance, it has been criticized for ignoring systematic differences between countries that predate their legal origins (Klerman et al. 2011) and for failing to document the mechanisms through which legal origins impact contemporary outcomes (Bazzi and Clemens 2013).[1]

This literature has also been critiqued for possibly overstating the extent to which countries that share legal origins have similar substantive laws. Most notably, in their prominent initial study, LLSV's data suggest that legal origins predict the legal protections provided to investors (La Porta et al. 1998), which implies

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[1] There are, of course, examples of research that takes steps to avoid these concerns. For instance, Oto-Peralías and Romero-Ávila (2014) trace the link between endowments and current legal outcomes within the English common-law legal family through the colonial legal administrative apparatus. The measure of the extent of indirect rule in each colony is constructed as the ratio of colonially recognized customary court cases to the total number of court cases in 1955, with the latter comprising both customary court cases heard by native chiefs and magistrate court cases handled by British officials.

that countries with similar legal origins are likely to offer similar legal protections. However, subsequent research demonstrates that the link between countries' legal origins and their investor protections can be attributed to errors in LLSV's coding of countries' laws (Spamann 2010a). Once these errors are corrected, the correlation between countries' legal origins and their investor protections disappear. This finding calls into question the link between legal origins and legal substance and undermines a key contribution of the legal origins literature. And because detailed cross-country coding of most areas of law does not exist,[2] the relationship between legal origins and legal substance has not been adequately explored to date.

Moreover, even if legal origins once predicted the substantive legal rules that countries adopted, it is not obvious that this influence persists today. For example, early in their history, common-law countries may have primarily looked to other common-law countries when drafting their laws. But today those same countries may instead look to a country that is a leading regulator in a given area of law as their model, regardless of whether that country had the same legal origins. In addition, countries may now model their legal rules on the ones adopted or recommended by international or regional organizations, such as the European Union (EU), instead of emulating countries with shared legal origins or histories. If this is correct, legal origins may not explain the variation in laws that countries have adopted more recently.

This article provides a more comprehensive assessment of the relationship between legal origins and legal substance than what exists to date. We are able to do this because of two new comparative data sets that provide detailed coding of substantive legal regimes around the world: one data set documents countries' property laws, and the other documents countries' antitrust laws. To the best of our knowledge, with the exception of data sets that code national constitutions, these data sets represent the largest cross-country efforts to code entire bodies of law. These data sets thus allow us to assess the relationship between legal origins and legal substance with more nuance than prior research. Moreover, they offer the practical advantage of covering one older area of regulation (property) and one newer area of regulation (antitrust). Unlike LLSV's work and related research, both data sets were also coded for projects unrelated to the study of legal origins, which makes it less likely that any errors in their coding correlate with countries' legal origins.

We also use a method that we believe is novel to studying the relationship between legal origins and legal substance. Prior research projects aggregated relevant variables to create indexes of aspects of countries' legal systems[3] and then assessed whether legal origins are correlated with higher or lower scores on them.

[2] Corporate law is an exception. See the extensive literature in the field, for example, Armour et al. (2009a, 2009b), Jackson and Roe (2009), Roe (2006), La Porta, López-de-Silanes, and Shleifer (2013), La Porta et al. (1998), and Spamann (2010a).

[3] For example, La Porta et al. (1997, 1998) create an index of countries' legal protections provided to investors, and Botero et al. (2004) create an index of countries' legal protections afforded to workers.

The shortcoming with this aggregated-variable approach, however, is that countries may have similar index scores despite having dissimilar underlying laws. In contrast, we borrow a method previously used to study legal diffusion (Elkins, Ginsburg, and Melton 2008; Law and Versteeg 2012; Bradford et al. 2019a) and use country pairs as our unit of observation. We calculate the correlation between each pair of countries' property regimes and the correlation between the same pair of countries' antitrust regimes. We then regress the correlations of property law and antitrust law against a dummy variable for whether a country pair has the same legal origin.

Across a range of regression specifications, our empirical analysis shows that having the same legal origin is strongly associated with having more similar property laws, but it has no clear association with countries' antitrust laws. This finding suggests that legal origin may have been a powerful determinant of a country's substantive laws in some areas, but the influence of legal origin may have waned in other areas. We offer suggestive evidence that this result is explained, at least in part, by alternative influences that have shaped a country's antitrust laws more than its shared legal origin or colonial history—a trend that is absent in property law.

2. Background

2.1. The Legal Origins Literature

Scholars have long documented how countries' legal systems are largely based on common-law or civil-law models initially developed in Europe (David and Brierley 1985; Glendon, Gordon, and Osakwe 1994; Zweigert and Kötz 1998; Garoupa and Pargendler 2014). These legal models were then transmitted around the world through mechanisms like conquest, colonization, and commerce. As a result of this diffusion, although countries' laws are heterogenous in a myriad of ways, their legal systems can be grouped into a handful of categories according to their original models.[4] These groups have alternatively been described as legal origins, legal traditions, and legal families.[5]

In the 1990s, an influential line of research began to examine the link between countries' legal origins and their contemporary economic outcomes. This research began with two seminal articles from LLSV: La Porta et al. (1997) and (1998). These articles document a link between countries' legal origins and the substantive legal protections they provide to investors and then further argue that stronger investor protections are associated with greater financial development. The finding that legal origins explain much of the variation in countries' economic performance led to an explosion of research. This research generally

[4] The way to divide these groups is contested. For example, La Porta, López-de-Silanes, and Shleifer (2008) divide countries into four groups; Klerman et al. (2011) divide countries into six groups; and Chang, Garoupa, and Wells (2021) argue that countries can be divided into any number of groups.

[5] On the controversies concerning legal families' taxonomy, see Pargendler (2012).

followed LLSV, demonstrating the link between legal origins and cross-country legal differences and then showing how those legal differences are associated with important outcomes.

In a review of this literature, La Porta, López-de-Silanes, and Shleifer (2008) argue that the research on legal origins can be broken into three categories.[6] The first category of research directly follows LLSV's work by examining the relationship between legal origins and some aspect of investor protection, corporate law, or contract enforcement (for example, La Porta et al. 1999, 2000, 2002; Dyck and Zingales 2004; Djankov, McLiesh, and Ramalho 2006; La Porta, López-de-Silanes, and Shleifer 2006; Djankov, McLiesh, and Shleifer 2007; Djankov et al. 2008a, 2008b; Spamann 2010b). The second category of research documents the link between legal origins and government regulation of economic activity and markets (Djankov et al. 2002, 2003b; Botero et al. 2004; Mulligan and Shleifer 2005a, 2005b). The third category investigates the relationship between legal origins and features of the judiciary (for example, Djankov et al. 2003a, 2008a; La Porta et al. 2004). Although there are differences in the methods and data used in these categories of research, they all largely find that common-law legal systems are associated with more secure property rights, greater levels of judicial independence, and superior financial development.

2.2. The Link between Legal Origins and Legal Substance

In addition to being widely influential, this literature has also been widely criticized (Berkowitz, Pistor, and Richard 2003a, 2003b; Rajan and Zingales 2003; Licht, Goldschmidt, and Schwartz 2005; Roe 2006; Klerman and Mahoney 2007; Roe and Siegel 2009; Spamann 2010a, 2010b; Bazzi and Clemens 2013). One line of criticism argues that cross-country differences in economic outcomes are better explained by factors other than legal origins. For example, former British colonies were wealthier than former French colonies at the time of colonization, and thus it is unsurprising that they are wealthier today (Klerman et al. 2011). Another line of criticism notes that countries with the same colonial or legal histories are likely to be similar along a range of social, political, and legal dimensions, which makes it nearly impossible to reliably trace the relationship between legal origins and contemporary outcomes through a specific mechanism (Bazzi and Clemens 2013).

The line of criticism that is relevant to our project questions the link between legal origins and legal substance. Most notably, Spamann (2010a) corrects inaccuracies in the data used by La Porta et al. (1997, 1998) to measure investor protection. When using the corrected data, Spamann (2010a) no longer finds that countries with common-law legal origins have stronger legal protections. Relatedly, Licht, Goldschmidt, and Schwartz (2005) reexamine the link between le-

[6] This literature has continued to develop since La Porta, López-de-Silanes, and Shleifer reviewed it in 2008, yet these broad categories of research lines remain largely consistent. For more recent surveys of the legal origins literature, see Spamann (2015, pp. 135–37) and Oto-Peralías and Romero-Ávila (2017).

gal origins and legal substance while accounting for cross-country cultural differences and conclude that the variation in legal regimes between countries with different legal origins may be overstated.

Moreover, the existing literature has done little to explore whether the link between legal origins and legal substance has continued even while new patterns of legal diffusion have emerged.[7] Although colonization may have previously been a primary method of legal diffusion, other forms subsequently developed (Linos 2011, 2013; Gadinis 2015). For instance, institutions like the EU, Organisation for Economic Co-operation and Development (OECD), and World Bank have urged countries, regardless of their legal origins, to adopt certain legal regimes on the basis of best practices in a wide range of policy areas (Bradford et al. 2019). In fact, in the 1990s, La Porta et al. (1998, p. 1119) recognized that these alternative patterns of diffusion may have greater influence over corporate law going forward. The current link between legal origins and legal substance may thus be more tenuous than earlier research suggests.

2.3. Our Approach

Our goal is to conduct a more nuanced study of the relationship between legal origins and legal substance than has previously been done. To do so, we examine the correlations between legal origins and the substance of countries' property laws and antitrust laws. We focus on these two areas because a detailed coding of countries' laws in these domains has recently been completed. To our knowledge, along with projects that code national constitutions (Elkins, Ginsburg, and Melton 2009; Law and Versteeg 2012, 2013; Ginsburg and Versteeg 2014; Gutmann, Hayo, and Voigt 2014), these are the most detailed data sets available in comparative law.[8]

Focusing on these areas of law provides two practical advantages. First, property is one of the first areas of law that countries adopt, often shortly after their modern legal systems are established. In contrast, although a handful of countries adopted antitrust regimes prior to World War II, most antitrust laws were adopted after 1990 (Bradford et al. 2019b). This variance allows us to test one area of law with old roots and another area of law with new roots. Second, these data sets were coded for projects unrelated to the study of legal origins. Thus, any coding errors are unlikely to be correlated with countries' legal origins because of subjective bias, conscious or not, of the researchers.

In addition to using new data, our research design is also different than prior efforts to explore the link between legal origins and legal substance. Prior research uses the country as the unit of analysis and creates indexes to represent countries' legal substance (for example, Oto-Peralías and Romero-Ávila 2014). Although creating an index is a reasonable and standard way to measure legal

[7] But see Spamann (2009a), who observes that, at least in some fields, legal diffusion has tracked legal origins.

[8] As Spamann (2009b, p. 798) points out, large-sample, quantitative comparative law research projects often rely on a narrow set of information for each country. Our study is an exception.

systems, there are several drawbacks to using one to measure the similarity of legal regimes across countries. For one, it is possible that countries have the same scores on an index while having dissimilar legal regimes.[9] For another, indexes are often created using just a handful of variables, and those variables may not capture the intricacies of a country's legal regime.

Instead of looking at individual countries while using a single index of countries' property laws or antitrust laws, we use pairs of countries as our unit of observation. By looking at pairs of countries, we can examine the correlation in their laws across a large number of distinct variables. This approach has the advantage of directly assessing how similar legal provisions are across countries that have shared legal origins. In other words, our research design measures whether countries with shared legal origins are more likely to have highly correlated property or antitrust regimes.

3. Data

3.1. Legal Substance Data

Our property law data are introduced in Chang, Garoupa, and Wells (2021). The data set contains more than 250 variables on the contents of property law in 156 jurisdictions based on laws in 2015. Most of the jurisdictions in the data set are countries, but some of them are subnational jurisdictions that have their own property laws, such as Hong Kong, Macau, and Scotland. As property laws are not always enacted at the national level, in some cases the data use certain subnational jurisdictions as proxies for the whole nation.[10] Of the variables in the data, 108 key variables were selected and transformed into 170 dummy variables to construe property legal families. The dummy variables include, for instance, whether a country allows adverse possession of landownership and whether a country explicitly stipulates the numerus clausus principle. For our analysis, we use the same 170 variables.

Our antitrust law data are from the Comparative Competition Law Dataset introduced in Bradford et al. (2019b). This data set consists of detailed coding of antitrust law provisions from 131 jurisdictions—126 countries and five regional organizations—from the beginning of modern antitrust law until 2010. Because many jurisdictions have multiple relevant laws, the data set contains the coding of 700 individual laws. For each law, it includes a number of substantive variables regarding merger review, the regulation of anticompetitive agreements, and the

[9] To illustrate this point, imagine an index composed of four binary variables (A, B, C, and D) that are added together to create an index. If country X has provisions A and B coded 1, it may receive a score of 2 of 4 on the index. But if country Y has provisions C and D coded 1, it may also receive a score of 2 of 4 on the index despite having made entirely different substantive legal choices.

[10] For instance, New York property law is used as a proxy for US property law (which is a reasonable choice, given that Chang, Garoupa, and Wells [2021] find that it strongly correlates with California property law). In addition, property law in England and Wales is used as a proxy for UK property law; Ontario property law is used as a proxy for Canadian property law; and China's 2018 draft civil code, which is almost the same as the civil code eventually passed in May 2020, is used as a proxy for Chinese property law, disregarding Hong Kong's and Macau's different property laws.

abuse of dominance. It also includes variables that capture the institutional design of the antitrust regime, including whether the law recognizes a private right of action, the possibility of fines, or imprisonment as a remedy. Importantly, the data set contains the coding of the antitrust law regime in force in any given year, which means that it layers all the old and new laws in force in any given year to capture the entire set of antitrust laws in force each year. For our analysis, we use the 91 dummy variables in the data set that measure the substance of countries' antitrust regimes.

Figure 1 maps the coverage of our property and antitrust data. We have both property and antitrust data for 91 countries. As Figure 1 shows, the data sets include observations from all regions of the world, and the countries for which both data sets are available include the world's leading economies. Following the LLSV tradition, our analysis weights all countries equally, regardless of their relative wealth, population, or political importance.

3.2. Legal Origins Data

Our primary coding of countries' legal origins is based on data from LLSV (we also use three alternative measures of legal origins in Section 4.4).[11] The LLSV data set breaks countries into four categories. It first codes countries as either having common-law or civil-law legal traditions. Countries with civil-law traditions are further broken into one of three traditions: French, German, or Nordic. Even if countries incorporate influences from other legal traditions over time, the LLSV data still code countries on the basis of the initial legal origin.

Figure 2 presents countries' legal origins using the LLSV coding. As Figure 2 shows, many countries are of French legal origin, countries with German legal origin cluster in central Europe and East Asia, and Africa is divided among these two legal origins and English common law. Of the 91 countries in our sample, there are 13 countries with common-law legal origins, 57 countries with French civil-law legal origins, 17 with German civil-law legal origins, and four with Nordic civil-law legal origins.

3.3. Data Set Construction

Because our goal is to test whether countries with shared legal origins have similar substantive legal regimes, our unit of analysis is pairs of countries or, as they are referred to in the international relations literature, country dyads. To ensure that differences in data availability do not drive our results, we restrict our sample to dyads for which we have data on countries' property laws, antitrust laws, and legal origins. This results in a sample of 4,095 dyads composed of 91

[11] For the data, see Andrei Shleifer, data file (https://scholar.harvard.edu/files/shleifer/files/data_2.zip). The zipped file contains two spreadsheets. We use the legor07 variable in Legal_origins_JEL2008.dta; English common law is 1, French civil law is 2, German civil law is 4, and Nordic law is 5.

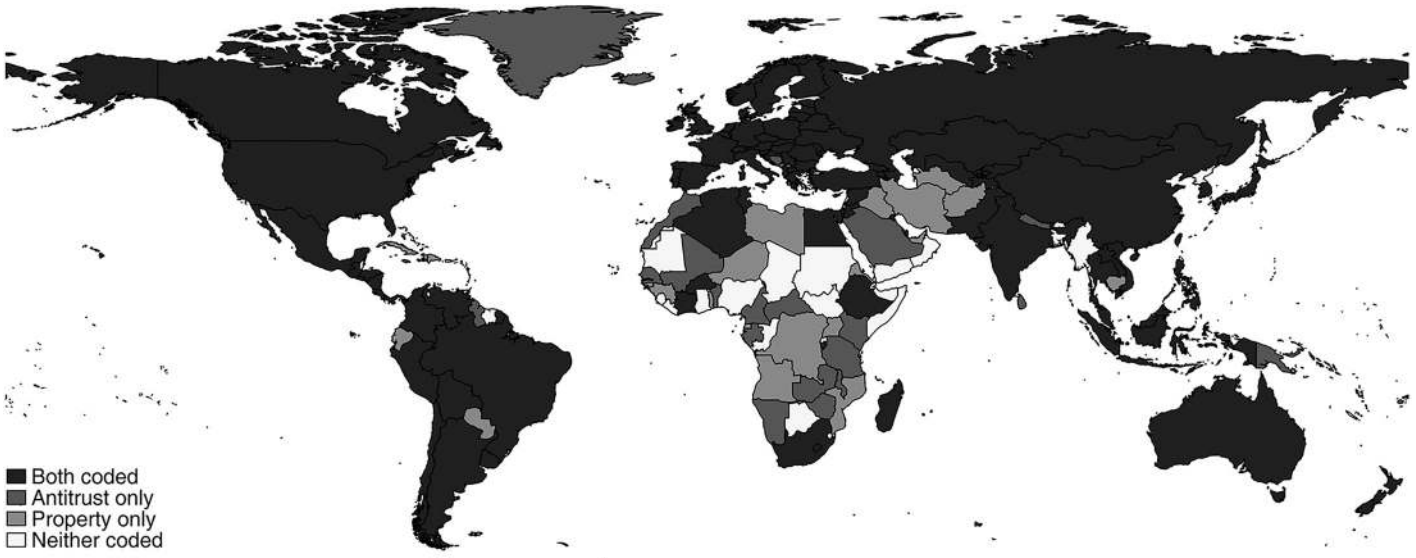

Figure 1. Availability of property and antitrust law data by country

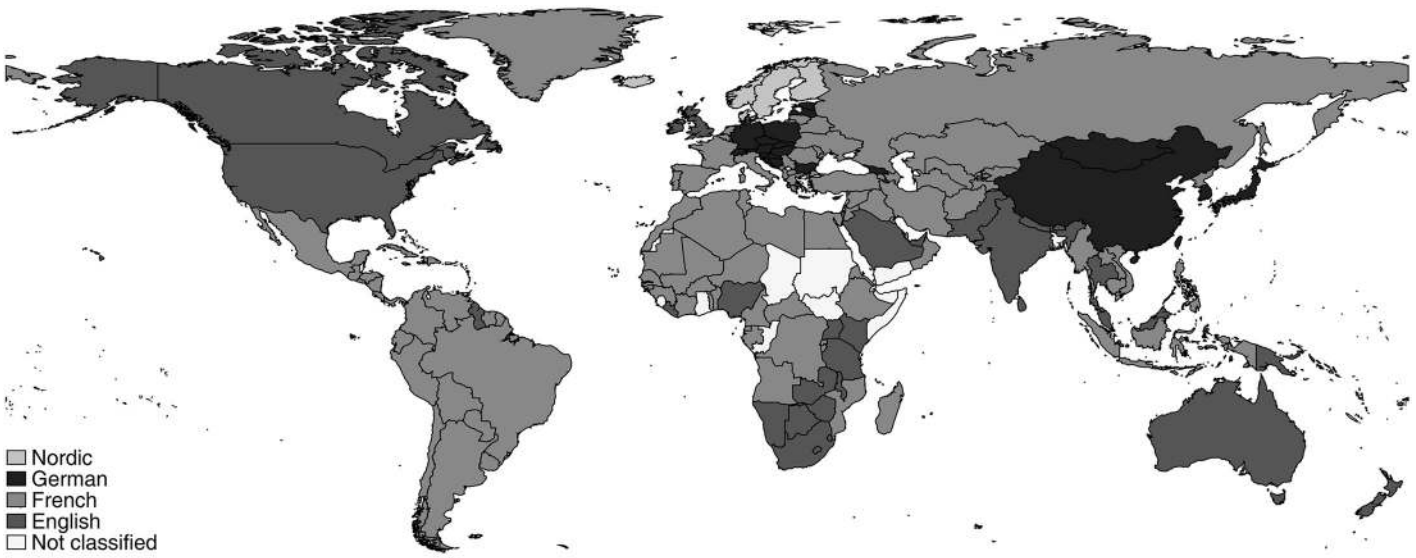

Figure 2. Legal origins by country using coding from La Porta et al. (1997, 1998)

countries ($91 \times 90/2 = 4{,}095$). Table OA1 in the Online Appendix lists the countries in our data set.

For each dyad, we create a measure of the similarity of their property laws and antitrust laws by calculating the correlation coefficient for all of the variables in each data set. We use this measure of similarity because its scale from -1 (indicating perfectly opposite coding) to 1 (indicating perfectly identical coding) provides an intuitive interpretation and because it is a method that has been previously used to study the similarity of legal regimes (Elkins, Ginsburg, and Melton 2008; Law and Versteeg 2012; Bradford et al. 2019a).[12] For instance, for the Albania-Vietnam dyad, we calculate the correlation between Albania's and Vietnam's coding for the 170 property variables. They have the same coding for 121 of 170 variables, which results in a correlation of .45. We similarly calculate the correlation of each dyad's antitrust laws on the basis of 91 variables in our data set. Albania and Vietnam have the same coding for 71 of 91 variables, which results in a correlation of .57.

For each dyad, we also create a variable to indicate whether the two countries have a shared legal origin. To do so, we code countries as having a shared legal origin if both countries in the dyad are coded as belonging to the same legal origin as categorized by LLSV. For instance, we code Australia-Canada as having a shared legal origin because LLSV categorizes both as having English common-law origin, and we code Algeria–Ivory Coast as having a shared legal origin because LLSV categorizes both as having French civil-law origin. In total, 44.3 percent of the dyads (1,816 of 4,095) have a shared legal origin.

Table 1 reports the summary statistics for our dyad-level data set. In addition to the variables mentioned above, Table 1 also reports summary statistics for six control variables we use in some regression specifications. Four of these control variables are measured at the dyad level: Distance, Contiguity, Common National Language, and Common Ethnic Language.[13] The other two are measured at the country level: Population and Nominal GDP (we use the natural logs because they are both right skewed, and it is likely that their ratios are relevant to the relationships we are testing).[14]

[12] Section 4.5 uses an alternative measure of similarity based on the percentage of variables for which the countries in a dyad have the same coding.

[13] These variables are from the dist_cepii.dta data set; see Center for Prospective Studies and International Information, GeoDist (http://www.cepii.fr/CEPII/en/bdd_modele/download.asp?id=6). Distance codes the population-weighted distance (in kilometers) between the two countries, Contiguity codes if the two countries have contiguous borders, Common National Language codes if the countries have the same official primary language, and Common Ethnic Language codes if the same language is spoken by at least 9 percent of the population in the countries.

[14] These variables are from the gravdata.dta data set; see Center for Prospective Studies and International Information, Gravity (http://www.cepii.fr/CEPII/en/bdd_modele/download.asp?id=8).

Table 1
Summary Statistics

	Mean	SD	Min	Max
Property law correlation	.30	.14	−.07	.99
Antitrust law correlation	.43	.13	−.04	.85
Shared legal origin (LLSV)	.44	.50	.00	1.00
Shared legal origin (Klerman et al. 2011)	.37	.48	.00	1.00
Shared colonial origin (Klerman et al. 2011)	.27	.44	.00	1.00
Shared legal order	.11	.31	.00	1.00
Distance	8.56	.92	4.74	9.88
Contiguous	.03	.17	.00	1.00
Common national language	.08	.27	.00	1.00
Common ethnic language	.09	.29	.00	1.00
Population of country 1	2.72	1.52	−.89	7.20
Population of country 2	2.71	1.55	−.89	7.20
Nominal gross domestic product of country 1	11.73	1.90	7.62	16.52
Nominal gross domestic product of country 2	11.82	1.90	7.62	16.52

Note. Distance is the natural log (in kilometers) weighted by population. Population is the natural log of populations in millions. LLSV = Rafael La Porta, Florencio López-de-Silanes, Andre Shleifer, and Robert Vishny. $N = 4{,}095$ dyads.

4. Results

4.1. Graphical Evidence

Figure 3 graphs the correlations of dyads' substantive laws by whether they share legal origins. The *X*-axis is the correlation coefficient between two dyads' substantive law variables, and the *Y*-axis is the percentage of dyads that have a given correlation.

Three results from Figure 3 are worth highlighting. First, almost all dyads have positive correlations for both areas of law. Just .8 percent of dyads (31 of 4,095) have property laws that are negatively correlated. These include several dyads with no obvious connections, like Pakistan-Portugal and Madagascar-Taiwan. Moreover, just .07 percent of dyads (3 of 4,095) have antitrust laws that are negatively correlated: Qatar-Tajikistan, Bolivia–South Africa, and Tajikistan-Kuwait.

Second, the correlations are lower on average for property law than for antitrust law. For property law, dyads have a mean correlation of .30 and a median correlation of .29. For antitrust law, dyads have a mean correlation of .43 and a median correlation of .43. This difference is notable given the distribution of correlations for both types of law. To illustrate, only 18 percent of dyads have a correlation above .43 for property law (which is the median for antitrust law). The higher correlations for antitrust are likely because most countries with antitrust laws adopted them only in the last few decades, and when they did adopt them, they followed models from the EU and the United States (Bradford et al. 2019a).

Third, having a shared legal origin is associated with higher correlations for property law, but it is not associated with higher correlations for antitrust law. For property law, dyads without a shared legal origin have a mean correlation of

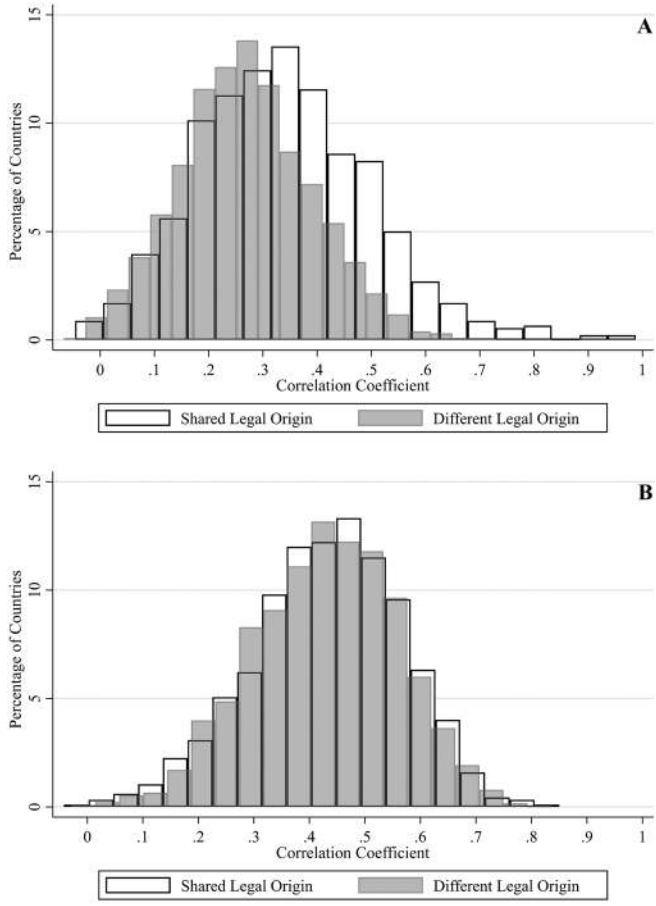

Figure 3. Correlations of legal substance by shared legal origin. *A,* Property laws; *B,* antitrust laws.

.27, and dyads with a shared legal origin have a mean correlation of .34. For antitrust law, however, dyads without a shared legal origin have a mean correlation of .43, and dyads with a shared legal origin also have a mean correlation of .43.

4.2. Empirical Specification

To more formally test the relationship between shared legal origins and similar substance of laws, we estimate equation (1) for Dyad_{jt}:

$$a_{jt} = \alpha + \text{SLO}_{jt}\beta_0 + \boldsymbol{\zeta}'_{jt}\beta_1 + \boldsymbol{\chi}'_j\beta_2 + \boldsymbol{\chi}'_t\beta_3 + \boldsymbol{\varphi}_j + \boldsymbol{\eta}_t + \varepsilon_{jt}. \quad (1)$$

The dependent variable a_{jt} is one of two measures of the similarity between legal regimes: the correlation coefficient between a dyad's property laws or the cor-

relation coefficient between a dyad's antitrust laws. The key independent variable SLO_{jt} codes whether the countries in a given dyad have a shared legal origin. For example, SLO_{jt} equals one if both countries in a dyad have English common-law legal origins but equals zero if one country's legal origin is English common law while the legal origin of the other country in the dyad is French civil law. In addition, ζ' represents control variables measured for $Dyad_{jt}$, χ' represents control variables that are measured separately for country j and for country t in $Dyad_{jt}$, φ_j represents fixed effects for country j, η_t represents fixed effects for country t,[15] and ε_{jt} is the error term. Because the errors for a given country are likely to be correlated for all the dyads that include it, we use multiway clustering to cluster our standard errors for both country j and country t.

It is important to note that it would be inappropriate to control for most variables that may influence the correlations between dyads' property or antitrust laws. This is because legal origins have been linked to a range of outcomes that occur after countries acquire a given legal origin (Bazzi and Clemens 2013), and many natural control variables are thus likely to have been influenced by legal origin. Therefore, controlling for factors like economic growth, political regimes, or membership in international institutions would be, in the words of Angrist and Pischke (2009), "bad controls"—or, in the language of political science, would introduce posttreatment bias. We thus use only a minimal set of control variables in our regressions.

4.3. Primary Results

Tables 2 and 3 report the results estimating equation (1) for property law and antitrust law, respectively. Column 1 simply includes the shared legal origin variable, column 2 adds fixed effects for country j and country t in each dyad,[16] and column 3 adds controls for the distance and contiguous borders between countries. Column 3 is our preferred specification because it does not include any variables likely to have been influenced by countries' shared legal origins (that is, it does not include any bad controls). For illustrative purposes, although these additional variables may be influenced by having a shared legal origin, in column 4 we add controls for whether dyads have common national and ethnic languages, and in column 5 we add controls for each country in a given dyad's population and nominal GDP.

[15] Because we have only one observation per dyad, we are unable to include fixed effects for combinations of states. Instead, the country fixed effects we include pick up any unobserved heterogeneity for all the dyads of which a given country is a member. That said, one concern with this approach is that a country can be country j in some dyads and country t in some dyads. The result is that the fixed effect for a country may be different for dyads in which the country is indexed as country j than for dyads in which the country is indexed as country t. In Section OA2 of the Online Appendix, we address this concern by developing a leave-out measure of all of a countries' other correlations (regardless of whether the country is indexed as country j or country t in a dyad) for which we control as an alternative to fixed effects.

[16] The F-test of the joint significance of the fixed effects allows us to reject the null hypothesis that the coefficients for the fixed effects are 0 (in other words, including the fixed effects increases the explanatory power of our regressions).

Table 2
Primary Results: Property Law Correlations

	(1)	(2)	(3)	(4)	(5)
Shared legal origin	.070**	.103**	.091**	.070**	.060**
	(.012)	(.016)	(.016)	(.014)	(.013)
Distance			−.042**	−.020**	−.032**
			(.008)	(.006)	(.006)
Contiguous			.064**	.057**	.057**
			(.021)	(.019)	(.019)
Common national language				.173**	.133**
				(.037)	(.029)
Common ethnic language				.001	−.016
				(.026)	(.020)
Population of country 1					−.003
					(.005)
Population of country 2					−.002
					(.006)
Nominal gross domestic product of country 1					.003
					(.004)
Nominal gross domestic product of country 2					.005
					(.005)
Country fixed effects	No	Yes	Yes	Yes	No
R^2	.058	.318	.372	.441	.182

Note. All models report ordinary least squares results. The dependent variable is the correlation coefficient of property law. Robust standard errors, two-way clustered on both the first country in the dyad and the second country in the dyad, are in parentheses. The constant is omitted. $N = 4{,}095$.
** $p < .01$.

The results in Table 2 show that having a shared legal origin is consistently associated with dyads having property laws that are more highly correlated. Not only are the estimates for all five specifications highly statistically significant ($p < .001$) but the size of the effect is substantively large. Our preferred specification in column 3 suggests that having a shared legal origin is associated with having a .09 higher correlation for property laws. To put this effect in perspective, the standard deviation for property law correlation is .14, which means that having a shared legal origin has a roughly .6 standard deviation effect. Or, in other words, an increase of .09 would move a median dyad to being roughly a 75th percentile dyad in property law correlation.

The results in Table 3 show that having a shared legal origin is associated with at most slightly higher correlations for antitrust laws. Although the estimates are statistically significant for several of the specifications, the size of the coefficient for our key independent variable is consistently small. In our preferred specification in column 3, the coefficient for shared legal origin is .01. However, the standard deviation for antitrust law correlation is .13, which suggests that having a shared legal origin is associated with roughly a .1-standard-deviation higher correlation. Using standard rules of thumb (Cohen 1988), this effect is negligible.

Table 3
Primary Results: Antitrust Law Correlations

	(1)	(2)	(3)	(4)	(5)
Shared legal origin	.001	(.019**	.013**	.009+	−.001
	(.010)	(.005)	(.005)	(.005)	(.010)
Distance			−.031**	−.028**	−.045**
			(.004)	(.004)	(.007)
Contiguous			−.004	−.004	.005
			(.011)	(.011)	(.018)
Common national language				.042**	.035
				(.014)	(.022)
Common ethnic language				−.018	−.052*
				(.012)	(.021)
Population of country 1					−.001
					(.007)
Population of country 2					−.000
					(.005)
Nominal gross domestic product of country 1					.001
					(.006)
Nominal gross domestic product of country 2					.000
					(.005)
Country fixed effects	No	Yes	Yes	Yes	No
R^2	.000	.611	.633	.635	.099

Note. All models report ordinary least squares results. The dependent variable is the correlation coefficient of antitrust law. Robust standard errors, two-way clustered on both the first country in the dyad and the second country in the dyad, are in parentheses. The constant is omitted. $N = 4{,}095$.

+ $p < .10$.
* $p < .05$.
** $p < .01$.

4.4. Alternative Measures of Legal Origin

Our primary results code countries' legal origins using data from La Porta, López-de-Silanes, and Shleifer (2008). There are, however, several alternative ways to measure legal origins. We specifically test the robustness of our results when using three of these alternative approaches.

First, we use an alternative measure of legal origins from Klerman et al. (2011). Their data add the categories mixed and Islamic to the four legal traditions used by LLSV. For instance, the coding in Klerman et al. (2011) recategorizes Israel from common law to mixed and Qatar from French civil law to Islamic. In addition, the data in Klerman et al. (2011) correct a number of mistakes in the LLSV coding.

Second, we use a measure of colonial origins from Klerman et al. (2011).[17] Most countries have legal origins based on their colonial relationships, but for some countries legal origins and colonial origins are not the same. For instance, some

[17] For the data, see Klerman et al. (2011), supplementary data (https://academic.oup.com/jla/article/3/2/379/899816#supplementary-data). The zipped file includes Klerman_etal_LO_v_CO.dta. We use the variable LO, which is their coding of legal origins, and the variable CO, which is their coding of colonial power.

countries with French legal origins were colonized by countries like Belgium, Italy, and the Netherlands, and some countries that were British colonies drew legal traditions from multiple countries (for example, South Africa). Countries are coded in Klerman et al. (2011) as having one of six colonial origins: former English colonies, former French colonies, former colonies of other French civil-law countries, colonies that were part of the Austro-Hungarian Empire, other former colonies, and countries never colonized.[18]

Third, we also code whether countries have shared legal orders. Klerman et al. (2011) do not always code countries' exact colonizer but instead place some colonial powers in the other French civil-law group or the other group instead of assigning them separate codes as colonizers. Wimmer and Min (2006) document colonial powers in all territories since 1816[19] and thus provide more exact information about colonial histories. Using these data, we code countries as having shared legal orders if they had a colonial relationship—for example, the United Kingdom and India—or if both countries were colonies of the same country—for example, India and Australia.

Figure 4 plots the coefficients of interest when using these alternative approaches to coding legal origins. The coefficients for legal origins using LLSV's coding are reported in Tables 2 and 3, the coefficients for legal origins using the coding in Klerman et al. (2011) are reported in Tables OA4 and OA5, the coefficients for colonial origins using the coding in Klerman et al. (2011) are reported in Tables OA6 and OA7, and the coefficients for shared legal order are reported in Tables OA8 and OA9. Separate lines plot the five regression specifications initially introduced in Tables 2 and 3. For each group of five lines, the top line is the coefficient from column 1, the bottom line is the coefficient from column 5, and our preferred specification from column 3 is shown in black.

The results in Figure 4 show that these alternative ways of measuring shared legal origins produce results that are similar to our primary ones. The coefficients for property law are almost all positive, statistically significant, and substantively large. In contrast, the coefficients for antitrust law are mostly close to 0 and frequently statistically insignificant. In addition to showing that our primary results are not sensitive to the measure of shared legal origins we use, Figure 4 also makes it clear that it is difficult to know which measure of shared legal origins—for instance, legal origins or colonial histories—has a stronger association with countries' substantive property law or antitrust laws. This is because the confidence intervals are largely overlapping for the alternative specifications. As a re-

[18] When country-level data are transformed into dyads, simply treating two countries, both of which were not colonized, as having the same colonial history creates bias. Thus, a dummy variable Both Not Colonized (which equals one if neither country in a pair has been colonized) is included in these regressions.

[19] For the data, see Andreas Wimmer, Data, From Empire to Nation-State (Replication Data), Territorial Data, 1816–2001 (http://www.columbia.edu/~aw2951/) The variable imppower identifies the imperial power at a territory level. For an easier-to-use data set, see GitHub, Our World in Data: Adding Colonial Regimes—Minner and Wim (2006) (https://github.com/owid/owid-datasets/tree/master/datasets/Colonial%20Regimes%20-%20Minner%20and%20Wim%20(2006)).

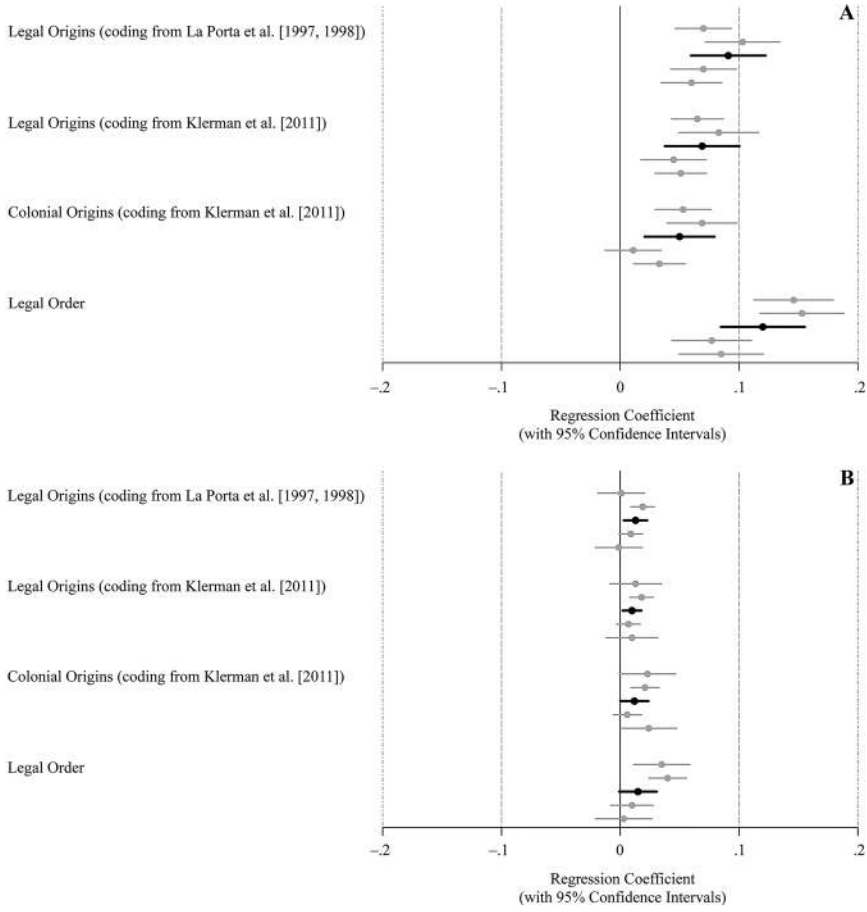

Figure 4. Coefficient plots**.** *A,* Property laws; *B,* antitrust laws

sult, we cannot say with confidence whether countries with shared legal origins, shared colonial histories, or shared legal orders are more likely to have similar substantive legal regimes in property and antitrust law.

4.5. Robustness

Our primary results are robust to a range of alternative modeling choices and specifications. Because these results are consistent with our main findings, this discussion is brief, and the results are reported in Section OA4 of the Online Appendix. First, other research calculates the similarity of legal regimes on the basis of the percentage of variables that are coded the same instead of the correlations across variables (Elkins, Ginsburg, and Melton 2009). Our results are robust to using this alternative approach. Second, our primary results aggregate all types of

shared legal origins even though there may be heterogenous effects based on the type of legal origin. But our results are robust when we include separate dummy variables for different types of shared legal origins. In the Online Appendix, we also separately report the average correlations for all 10 possible combinations of legal origins. When disaggregating the data in this way, the patterns are consistent with our overall results. Third, EU member states and the United Kingdom, regardless of their legal origins, have adopted similar antitrust regimes, which may negatively influence the overall relationship between shared legal origins and antitrust laws. But our results remain consistent even when we exclude either the 27 EU members and the United Kingdom or all European countries. Fourth, for consistency with our property data, we use all 91 substantive variables in our antitrust data when measuring the similarity of countries' antitrust regimes, but our results are robust to using only the variables that are identified in prior research as the most substantively important (Bradford et al. 2019a).

5. Discussion

Our results suggest that common legal origins predict the similarity in countries' property laws, but they do little to predict similarity in antitrust laws. For example, the United Kingdom and New Zealand, which share a legal origin, have a .17 correlation in their antitrust laws, while the United Kingdom and France, which do not share a legal origin, have a .27 correlation in their antitrust laws. Similarly, the correlation in antitrust law between Ireland and the United States (.53) is lower than that between Ireland and Estonia (.68), even though the former share a legal origin while the latter do not.

While the European examples may be attributed to the direct influence of the EU, there is a similar phenomenon in Asia. Common-law countries like India, Malaysia, Pakistan, and Singapore have antitrust laws that are not highly correlated with the United Kingdom's (.31, .37, .21, and .28, respectively). Instead, their antitrust laws are more closely aligned with those in countries in civil-law legal families. For instance, these four countries' antitrust law correlations with Taiwan, a member of the German civil-law family, are all higher than their correlations with the United Kingdom (.48, .39, .43, and .35, respectively). Across these examples, the property laws in those common-law countries remain similar to their common-law peers.

There are also a few examples in which legal origins would predict certain countries' antitrust laws to follow French or German legal tradition, but they followed a different path. For example, antitrust laws of Bolivia (.20 with France; .41 with the United States), Japan (.37 with Germany; .69 with the United States), Peru (.39 with France; .51 with the United States), and Panama (.49 with France; .62 with the United States) correlate more closely with countries associated with the common-law tradition despite their French and German legal origins.

Of course, there are examples in which shared legal origins correlate with both property and antitrust laws: France and Belgium have a .71 correlation for prop-

erty law and a .62 correlation for antitrust law, and South Korea and Taiwan have a .72 correlation for property law and a .65 correlation for antitrust law. There are also examples of low correlations across both property law and antitrust law when the dyads do not share a legal origin: Australia and China have a .20 correlation for property law and a .18 correlation for antitrust law, and Israel and Indonesia have a .16 correlation for property law and a .19 correlation for antitrust law.

But, in general, countries with shared legal origins are not more likely to have similar antitrust regimes than countries without shared legal origins. This is likely for several reasons. For one, countries' antitrust laws have been shaped through regulators' and policy makers' engagement in various international organizations and transgovernmental networks. A specialized network of antitrust regulators—the International Competition Network (ICN)—has been particularly influential, but more general international organizations—like the OECD and the United Nations Conference on Trade and Development—have fostered global antitrust convergence through the promotion of international best practices (Tritell and Kraus 2018).

Another important factor is that antitrust laws are largely a more recent phenomenon, with most countries adopting them after 1990 (Bradford and Chilton 2019). By that time, these countries had many models to emulate. The EU in particular offered an attractive template to emulate given the specific and detailed nature of EU antitrust laws and their availability in many languages (Bradford et al. 2019b). The EU's active push to export its antitrust laws through trade agreements and to extend regulatory cooperation and technical assistance for new antitrust regimes likely further explains why the EU's influence prevails over that exerted by legal traditions. Many multinational companies also conform their global conduct to EU antitrust law as the most stringent law, which entrenches EU antitrust law as the global de facto norm (Bradford 2020). This de facto convergence often also paves the way for de jure convergence as countries codify EU-style antitrust laws domestically with the support of their export-oriented corporations that already bear the costs of EU compliance and prefer uniform rules (Vogel 1997; Bradford 2020).

European Union law also diffuses through its member states. For instance, because Spain and Germany harmonized their laws with EU antitrust law, when Colombia was copying Spanish antitrust law or Taiwan was copying German antitrust law (correlations of .58 and .57, respectively), they were effectively copying EU law. This mediating influence of EU members thus explains why Colombia and Taiwan have antitrust laws that are similar (the correlation is .52) despite their different legal origins.

The same patterns likely exist in other areas where legal diffusion has been influenced by EU law or other leading regulatory authorities like the OECD (see, for example, Linos 2013). For example, EU law has become the gold standard globally in data privacy. Today, over 100 countries have adopted privacy laws, most of them resembling the EU law on data protection (Greenleaf 2014; Schwartz and Peifer 2017). These countries represent different legal traditions and align many

common-law jurisdictions with the European civil-law jurisdictions—often for the same reasons they emulate EU antitrust laws. The same pattern may hold for other areas where the EU has been a regulatory leader, including food safety, chemical regulations, animal welfare, antidiscrimination law, and environmental policy (Bradford 2020).

6. Conclusion

Our results show that shared legal origins are associated with countries having similar property laws, but they are not associated with countries having similar antitrust laws. This finding adds to the existing, contested debate on the relationship between legal origins and legal substance by empirically showing that this relationship can vary from one area of law to another. The results also highlight how other forms of influence, including that exercised by supranational legal institutions such as the European Union, can override the influence exerted by legal traditions. Given the growing lawmaking by supranational institutions,[20] it is also possible that the significance of legal origins will further wane in the coming decades.

Our results also point to at least two major avenues for future research. First, continued research is needed to explore the generalizability of our results. For instance, although we have no reason to believe that property is unique among areas of historical legal regulation or that antitrust is unique among areas that have only recently been regulated, it is possible that our findings are specific to these areas. In addition, we exclusively test the similarity of countries' laws on the books, and we are unable to look at the way those laws are applied and enforced. Although this concern is one that plagues the entire legal origins literature, future research should find ways to explore the relationship between legal origins and laws in action. Moreover, we focus on average effects for a cross section of countries, but it is possible that there are heterogeneous effects across time or subsets of countries.

Second, future research should do more to document the mechanisms that produced the patterns we found. For instance, our results may simply be driven by property law being an old, well-established area of law, while antitrust is a relatively new area of law in most jurisdictions. Alternatively, the key explanatory variable may be that supranational lawmaking has done little to influence property law, while the EU and ICN have been critical in shaping antitrust laws around the world. Property law is also less complex and technical than antitrust law, which lends the development of antitrust law perhaps more readily to alternative sources of influence. Relatedly, Chang and Smith (2019) suggest that, because it is easier to change laws when there are fewer ripple effects on other laws, countries' isolated legal doctrines may be more likely to converge with global norms than countries' legal doctrines that interconnect with many other

[20] For instance, in addition to the European Union, at least five other regional organizations have some degree of supranational competition policy: the Andean Community, East African Community, Economic Community of West African States, European Free Trade Area, and West African Economic and Monetary Union.

doctrines. It is possible that property laws may be less likely to evolve because they are more deeply connected to many other aspects of a country's legal system. Moreover, functional theories of legal convergence suggest that countries' laws are more likely to converge in cases in which one rule is clearly more efficient but less likely to converge in cases in which multiple laws are similarly efficient (Levmore 1987; Dari-Mattiacci and Guerriero 2019). This points to the need for more research into whether evolution in legal regimes is related to the effects of legal differences (for example, Acemoglu and Johnson 2005; Guerriero 2016). Finally, it is possible that laws that are more likely to govern cross-border conduct (such as antitrust) are more likely to be subject to foreign influences compared with laws that primarily govern legal relationships within countries (such as property).

That said, despite the need for future research, we believe that this article provides the most detailed investigation yet conducted into the relationship between legal origins and legal substance. And, by doing so, it provides important new evidence about one of the most prominent debates on the influence of legal history on contemporary economic, political, and social outcomes.

References

Acemoglu, Daron, and Simon Johnson. 2005. Unbundling Institutions. *Journal of Political Economy* 113:949–95.

Anderson, Siwan. 2018. Legal Origins and Female HIV. *American Economic Review* 108:1407–39.

Angrist, Joshua D., and Jörn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.

Armour, John, Simon Deakin, Priya Lele, and Mathias Siems. 2009a. How Do Legal Rules Evolve? Evidence from Crosscountry Comparison of Shareholder, Creditor, and Worker Protection. *American Journal of Comparative Law* 57:579–630.

Armour, John, Simon Deakin, Viviana Mollica, and Mathias Siems. 2009b. Law and Financial Development: What We Are Learning from Time-Series Evidence. *Brigham Young University Law Review,* pp. 1435–1500.

Bazzi, Samuel, and Michael A. Clemens. 2013. Blunt Instruments: Avoiding Common Pitfalls in Identifying the Causes of Economic Growth. *American Economic Journal: Macroeconomics* 5:152–86.

Berkowitz, Daniel, Katharina Pistor, and Jean-Francois Richard. 2003a. Economic Development, Legality, and the Transplant Effect. *European Economic Review* 47:165–95.

———. 2003b. The Transplant Effect. *American Journal of Comparative Law* 51:163–204.

Botero, Juan C., Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. The Regulation of Labor. *Quarterly Journal of Economics* 119:1339–82.

Bradford, Anu. 2020. *The Brussels Effect: How the European Union Rules the World*. New York: Oxford University Press.

Bradford, Anu, and Adam S. Chilton. 2019. Trade Openness and Antitrust Law. *Journal of Law and Economics* 62:29–65.

Bradford, Anu, Adam Chilton, Katerina Linos, and Alexander Weaver. 2019a. The Global Dominance of European Competition Law over American Antitrust Law. *Journal of*

Empirical Legal Studies 16:731–66.
Bradford, Anu, Adam S. Chilton, Christopher Megaw, and Nathaniel Sokol. 2019b. Competition Law Gone Global: Introducing the Comparative Competition Law and Enforcement Datasets. *Journal of Empirical Legal Studies* 16:411–43.
Chang, Yun-chien, Nuno Garoupa, and Martin T. Wells. 2021. Drawing the Legal Family Tree: An Empirical Comparative Study of 170 Dimensions of Property Law in 129 Jurisdictions. *Journal of Legal Analysis* 13:231–82.
Chang, Yun-chien, and Henry E. Smith. 2019. Convergence and Divergence in Systems of Property Law: Theoretical and Empirical Analyses. *Southern California Law Review* 92:785–808.
Cohen, Jacob. 1988. *Statistical Power Analysis for the Behavioral Sciences*. 2d ed. New York: Lawrence Erlbaum.
Dam, Kenneth W. 2006. *The Law-Growth Nexus: The Rule of Law and Economic Development*. Washington, DC: Brookings Institution Press.
D'Amico, Daniel J., and Claudia Williamson. 2015. Do Legal Origins Affect Cross-Country Incarceration Rates? *Journal of Comparative Economics* 43:595–612.
Dari-Mattiacci, Giuseppe, and Carmine Guerriero. 2019. Divergence and Convergence at the Intersection of Property and Contract. *Southern California Law Review* 92:809–50.
David, René, and John E. C. Brierley. 1985. *Major Legal Systems in the World Today: An Introduction to the Comparative Study of Law*. 3d ed. London: Stevens & Sons.
Djankov, Simeon, Oliver Hart, Caralee McLiesh, and Andrei Shleifer. 2008a. Debt Enforcement around the World. *Journal of Political Economy* 116:1105–49.
Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. The Regulation of Entry. *Quarterly Journal of Economics* 117:1–37.
———. 2003a. Courts. *Quarterly Journal of Economics* 118:453–517.
———. 2008b. The Law and Economics of Self-Dealing. *Journal of Financial Economics* 88:430–65.
Djankov, Simeon, Caralee McLiesh, Tatiana Nenova, and Andrei Shleifer. 2003b. Who Owns the Media? *Journal of Law and Economics* 46:341–81.
Djankov, Simeon, Caralee McLiesh, and Rita Maria Ramalho. 2006. Regulation and Growth. *Economics Letters* 92:395–401.
Djankov, Simeon, Caralee McLiesh, and Andrei Shleifer. 2007. Private Credit in 129 Countries. *Journal of Financial Economics* 84:299–329.
Dyck, Alexander, and Luigi Zingales. 2004. Private Benefits of Control: An International Comparison. *Journal of Finance* 59:537–600.
Elkins, Zachary, Tom Ginsburg, and James Melton. 2008. Baghdad, Tokyo, Kabul . . . : Constitution Making in Occupied States. *William and Mary Law Review* 49:1139–78.
———. 2009. *The Endurance of National Constitutions*. Cambridge: Cambridge University Press.
Fredriksson, Per G., and Jim R. Wollscheid. 2015. Legal Origins and Climate Change Policies in Former Colonies. *Environmental and Resource Economics* 62:309–27.
Gadinis, Stavros. 2015. Three Pathways to Global Standards: Private, Regulator, and Ministry Networks. *American Journal of International Law* 109:1–57.
Garoupa, Nuno, and Mariana Pargendler. 2014. A Law and Economics Perspective on Legal Families. *European Journal of Legal Studies* 7:36–60.
Ginsburg, Tom, and Mila Versteeg. 2014. Why Do Countries Adopt Constitutional Review? *Journal of Law, Economics, and Organization* 30:587–622.
Glendon, Mary Ann, Michael William Gordon, and Christopher Osakwe. 1994. *Compar-*

ative Legal Traditions: Text, Materials, and Cases on the Civil and Common Law Traditions, with Special Reference to French, German, English, and European Law. 2d ed. St. Paul: West.

Greenleaf, Graham. 2014. *Asian Data Privacy Laws: Trade and Human Rights Perspectives*. New York: Oxford University Press.

Guerriero, Carmine. 2016. Endogenous Property Rights. *Journal of Law and Economics* 59:313–58.

Gutmann, Jerg, Bernd Hayo, and Stefan Voigt. 2014. Determinants of Constitutionally Safeguarded Judicial Review: Insights Based on a New Indicator. Pp. 216–54 in *Empirical Legal Analysis: Assessing the Performance of Legal Institutions,* edited by Yun-chien Chang. New York: Routledge.

Jackson, Howell E., and Mark J. Roe. 2009. Public and Private Enforcement of Securities Law: Resource-Based Evidence. *Journal of Financial Economics* 93:207–38.

Klerman, Daniel, and Paul G. Mahoney. 2007. Legal Origin? *Journal of Comparative Economics* 35:278–93.

Klerman, Daniel M., Paul G. Mahoney, Holger Spamann, and Mark I. Weinstein. 2011. Legal Origin or Colonial History? *Journal of Legal Analysis* 3:379–409.

La Porta, Rafael, Florencio López-de-Silanes, Cristian Pop-Eleches, and Andrei Shleifer. 2004. Judicial Checks and Balances. *Journal of Political Economy* 112:445–70.

La Porta, Rafael, Florencio López-de-Silanes, and Andrei Shleifer. 2006. What Works in Securities Laws? *Journal of Finance* 61:1–32.

———. 2008. The Economic Consequences of Legal Origins. *Journal of Economic Literature* 46:285–332.

———. 2013. Law and Finance after a Decade of Research. Pp. 2A:425–91 in *Handbook of Economics of Finance,* edited by George M. Constantinides, Milton Harris, and René M. Stulz. Amsterdam: Elsevier.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. Legal Determinants of External Finance. *Journal of Finance* 52:1131–50.

———. 1998. Law and Finance. *Journal of Political Economy* 106:1113–55.

———. 1999. The Quality of Government. *Journal of Law, Economics, and Organization* 15:222–79.

———. 2000. Agency Problems and Dividend Policies around the World. *Journal of Finance* 55:1–33.

———. 2002. Investor Protection and Corporate Valuation. *Journal of Finance* 57:1147–70.

Law, David S., and Mila Versteeg. 2012. The Declining Influence of the United States Constitution. *New York University Law Review* 87:762–858.

———. 2013. Sham Constitutions. *California Law Review* 101:863–952.

Levmore, Saul. 1987. Variety and Uniformity in the Treatment of the Good-Faith Purchaser. *Journal of Legal Studies* 16:43–65.

Licht, Amir N., Chanan Goldschmidt, and Shalom H. Schwartz. 2005. Culture, Law, and Corporate Governance. *International Review of Law and Economics* 25:229–55.

Linos, Katerina. 2011. Diffusion through Democracy. *American Journal of Political Science* 55:678–95.

———. 2013. *The Democratic Foundations of Policy Diffusion: How Health, Family, and Employment Laws Spread across Countries*. New York: Oxford University Press.

Mahoney, Paul G. 2001. The Common Law and Economic Growth: Hayek Might Be Right. *Journal of Legal Studies* 30:503–25.

Mulligan, Casey B., and Andrei Shleifer. 2005a. Conscription as Regulation. *American Law and Economics Review* 7:85–111.

———. 2005b. The Extent of the Market and the Supply of Regulation. *Quarterly Journal of Economics* 120:1445–73.

Oto-Peralías, Daniel, and Diego Romero-Ávila. 2014. The Distribution of Legal Traditions around the World: A Contribution to the Legal-Origins Theory. *Journal of Law and Economics* 57:561–628.

———. 2017. *Legal Traditions, Legal Reforms, and Economic Performance: Theory and Evidence*. Cham: Springer International.

Pargendler, Mariana. 2012. The Rise and Decline of Legal Families. *American Journal of Comparative Law* 60:1043–74.

Rajan, Raghuram G., and Luigi Zingales. 2003. The Great Reversals: The Politics of Financial Development in the Twentieth Century. *Journal of Financial Economics* 69:5–50.

Roe, Mark J. 2006. Legal Origin, Politics, and Modern Stock Markets. *Harvard Law Review* 120:460–527.

Roe, Mark J., and Jordan I. Siegel. 2009. Finance and Politics: A Review Essay Based on Kenneth Dam's Analysis of Legal Traditions in the Law-Growth Nexus. *Journal of Economic Literature* 47:781–800.

Schwartz, Paul M., and Karl-Nikolaus Peifer. 2017. Transatlantic Data Privacy Law. *Georgetown Law Journal* 106:115–79.

Spamann, Holger. 2009a. Contemporary Legal Transplants: Legal Families and the Diffusion of (Corporate) Law. *Brigham Young University Law Review* 2009:1813–77.

———. 2009b. Large-Sample, Quantitative Research Designs for Comparative Law? *American Journal of Comparative Law* 57:797–810.

———. 2010a. The "Antidirector Rights Index" Revisited. *Review of Financial Studies* 23:467–86.

———. 2010b. Legal Origin, Civil Procedure, and the Quality of Contract Enforcement. *Journal of Institutional and Theoretical Economics* 166:149–65.

———. 2015. Empirical Comparative Law. *Annual Review of Law and Social Science* 11:131–53.

Tritell, Randolph, and Elizabeth Kraus. 2018. The Federal Trade Commission's International Antitrust Program. Washington, DC: Federal Trade Commission. https://www.ftc.gov/system/files/attachments/international-competition/ftc_international_antitrust_program_update_january_2021_fin.pdf.

Vogel, David. 1997. *Trading Up: Consumer and Environmental Regulation in a Global Economy*. Cambridge, MA: Harvard University Press.

Wimmer, Andreas, and Brian Min. 2006. From Empire to Nation-State: Explaining Wars in the Modern World, 1816–2001. *American Sociological Review* 71:867–97.

Zhang, Angela Huyue, Jingchen Liu, and Nuno Garoupa. 2018. Judging in Europe: Do Legal Traditions Matter? *Journal of Competition Law and Economics* 14:144–78.

Zweigert, Konrad, and Hein Kötz. 1998. *An Introduction to Comparative Law*. 3d ed. Oxford: Oxford University Press.