

What Firms Know

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Abstract: A large literature shows that common law countries perform better than civil law countries along various dimensions of the institutional environment. The present paper contributes to this literature by showing that a similar result holds for another measure of institutional quality. That is, the ease with which information on rules and regulations is available to firms is much higher in common law compared with civil law countries. Roughly, one-third of this difference can be explained by differences in the level of business regulations across the two legal traditions. We provide some plausible reasons for these findings.

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1. Introduction

A large literature documents poorer quality of institutions in civil law compared with common law countries. Examples include entry regulation (Djankov et al. 2002), contract enforcement (Djankov et al. 2003), labor laws (Botero et al. 2004) and financial development (Djankov et al. 2008, La Porta et al. 1997). The present paper contributes to this literature by showing that another dimension of institutional development, the ease with which information on rules and regulations is available to firms (information availability), follows a similar pattern. That is, information availability is better in common law compared with civil law countries. One reason for this could be that governments in common law countries tend to interfere less with the functioning of the economy which implies fewer rules and regulation and hence less burden on firms in obtaining all the information. Another possibility is that civil law countries have a more centralized system of law-making where legislators draft laws “without gaps” (La Porta et al., Forthcoming). The more detailed codification of laws is likely to aggravate information requirements.

The plan of the paper is as follow. In section 2 we describe our data and the main variables. Empirical results are provided in section 3. The concluding section provides a summary of the important results.

2. Data and Main variables

We use firm level data from the World Bank’s Environment Survey (WBES, 1999), complemented with additional data sources for GDP, legal origin, etc. The WBES data are a nationally representative stratified random sample of firms with a common

questionnaire and sampling methodology for all participating countries. For most countries, samples were drawn from the complete company registers and the same set of minimum sampling guidelines was applied to ensure cross-country comparability. Batra et al. (2003) provide details of the sampling methodology. Previous work using these data includes, for example, Beck et al. (2005).

The dependent variable, *Information*, equals the response of firms to the following statement in the WBES: “In general, information on the laws and regulations affecting my firm is easy to obtain.” Response was recorded on a 1-6 scale as: fully disagree (1), disagree in most cases (2), tend to disagree (3), tend to agree (4), agree in most cases (5) and fully agree (6). The mean value of *Information* equals 4.1 and the standard deviation is 1.41. Percentage of firms reporting lowest to highest value of *Information* equal 5.5%, 9.5%, 14%, 25%, 29% and 17%, respectively.¹

Our main explanatory variable, *English*, is a dummy variable equal to 1 if a country’s legal structure is based on the English common law (20 countries) and 0 otherwise (French civil law, 30 countries). Following the literature on legal origin, we control for a number of variables to address the omitted variable bias problem. These controls include (data sources in bracket) the political rights index (Freedom House), a dummy variable, *PR*, which is equal to 1 if the electoral rule for the lower house is a form of proportional representation and 0 otherwise (Database for Political Institutions, World Bank), a dummy variable equal to 1 if the executive head is directly elected and 0 otherwise (Database for Political Institutions, World Bank), log of GDP per capita (PPP

¹ We note that the dependent variable is a subjective measure and could vary across firms depending on their personal experiences and how they interpret “tend to agree”, “fully agree”, etc. While this requires some caution in interpreting our results, we do not have any reason to believe that the stated subjectivity is systematically correlated with the legal tradition of countries.

adjusted, constant 2000 USD) in 2000 taken from World Bank's World Development Indicators and two dummy variables which indicate whether the firm is small (*Small*, less than 50 employees) or large (*Large*, more than 500 employees). The omitted category is medium firms. For religion, we use three dummy variables indicating the main religion of the country (La Porta et al., 1999). Main religions include Catholic, Muslim, Protestant and the rest.

We use additional controls to further raise our confidence against the omitted variable bias problem and to narrow down the channels through which legal origin may affect information availability. These controls, motivated by existing studies, include the following (data source in brackets): log of private credit to GDP ratio (Djankov et al. 2007), country-size measured by (log of) total population in 2000 (World Development Indicators, World Bank) and an index of corruption (International Country Risk Guide, 2000 values), a dummy variable indicating whether a firm exports or not, a dummy variable for firms that have operations (offices) in foreign countries, fixed effects for the legal organization of the firm (single proprietorship, partnership, cooperative, privately held corporation, corporation listed on stock exchange and the residual category), an index of creditor rights (from Djankov et al. 2007) under the assumption that more creditor rights imply more rules and laws and therefore greater information related problems. Lastly, we check the extent to which difference in the level of business regulation across the two legal traditions may be driving our main result. To this end, we control for an index of business regulation using Heritage Foundation's index of economic freedom (1999 values of the sub-index on regulation) which captures on a 1-5

scale the difficulty that firms face in starting, obtaining licenses and closing a business due to various regulations.

3. Estimation

We use ordered logit estimation method with all standard errors clustered on the country. Regression results are provided in Table 1. The sequence in which the controls are introduced does not matter much for our main results.

Regression results clearly show that irrespective of the set of controls, information availability is much better in common law than in civil law countries. The difference is economically large and statistically significant at less than 5% level. For example, without any other controls, the probability that a firm reports that information is very easily available (*Information* = 6) rises by 6.7 percentage points when we move from civil to common law (column 5, Table 1), a large effect given that only 16.9% of the firms in the full sample find information very easily available. The marginal effect declines to 4.6 percentage points when we control for the religion fixed effects (column 7, Table 1). However, it remains relatively stable otherwise.

Results for the remaining variables are as expected. Government owned firms, larger firms and smaller countries report significantly better information availability. Also, more creditor rights and heavier regulation of businesses is associated with worse information availability (significant at less than 5% level). Controlling for the business regulation index causes the estimated marginal effect of *English* to decline from .056 (not shown) to .039 (column 8, Table 1). This suggests that about one third of the difference

in information availability between common and civil law countries can be attributed to heavier business regulation in the civil law countries.

We performed a number of additional robustness checks. For example, we added the following controls to the list above: sector and continent fixed effects (Europe and North America, Latin America & Caribbean, Asia and Africa), ethno-linguistic fractionalization index, a dummy variable indicating if Right to Information Act is implemented in the country, percentage of its sales that a firm reports for tax purposes and regulation measures from the World Bank's Doing Business project (number of procedures to start a business, enforce a contract, register a property and the rigidity of employment index). With all these controls, the estimated marginal effect of the *English* dummy equaled .040 (p-value of .024) compared with .039 above.

4. Conclusion

The paper extends the theory of legal origins to another dimension of institutional development by showing that information on rules and regulations is more easily available to firms in common law compared with civil law countries. Among other factors, we find that heavier regulation of businesses, large country-size and small firm-size are associated with poorer quality of information availability.

References

- [1] Batra, Geeta, Daniel Kaufmann and Andrew H. W. Stone (2003), **Investment Climate Around the World: Voices of the Firms from the World Business Environment Survey**, World Bank, Washington DC.
- [2] Beck, Thorsten, Asli Demirguc-Kunt and Vojislav Maksimovic (2005), "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *Journal of Finance*, 60(1), pp. 137-177.
- [3] Botero, Juan, Simeon Djankov, Rafael La Porta, Florencio Lopez-de Silanes and Andrei Shleifer (2004), "The Regulation of Labor," *Quarterly Journal of Economics*, 119(4): 1339-82.
- [4] Djankov, Simeon, Rafael La Porta, Florencio Lopez-de Silanes and Andrei Shleifer (2002), "The Regulation of Entry," *Quarterly Journal of Economics*, 117(1): 1-37.
- [5] Djankov, Simeon, Rafael La Porta, Florencio Lopez-de Silanes and Andrei Shleifer (2003), "Courts," *Quarterly Journal of Economics*, 118(2): 453-517.
- [6] Djankov, Simeon, Caralee McLiesh and Andrei Shleifer (2007), "Private Credit in 129 Countries," *Journal of Financial Economics*, 84(2): 299-329.
- [7] Djankov, Simeon, Rafael La Porta, Florencio Lopez-de Silanes and Andrei Shleifer (2008), "The Law and Economics of Self Dealing," Forthcoming, *Journal of Financial Economics*.
- [8] La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer and Robert Vishny (1997), "Legal Determinants of External Finance," *Journal of Finance*, 52(3): 1131-50.
- [9] La Porta, Rafael, Florencio Lopez-de Silanes, Andrei Shleifer and Robert Vishny (1999), "The Quality of Government," *Journal of Law, Economics and Organization*, 15(1): 222-79.
- [10] La Porta, Rafael, Florencio Lopez-de Silanes and Andrei Shleifer (Forthcoming), "The Economic Consequences of Legal Origins," *Journal of Economic Literature*.

Table 1: Ordered Logit

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable: <i>Information</i>								
	Log Odds ratios				Marginal effects for the highest value of <i>Information</i>			
<i>English</i>	.461 ^{***} (.003)	.560 ^{***} (.000)	.323 ^{**} (.012)	.295 ^{**} (.041)	.067 ^{***} (.005)	.081 ^{***} (.001)	.046 ^{**} (.013)	.039 ^{**} (.050)
<i>Small</i>		-.251 ^{***} (.001)	-.268 ^{***} (.000)	-.353 ^{***} (.000)		-.033 ^{***} (.001)	-.036 ^{***} (.000)	-.043 ^{***} (.000)
<i>Large</i>		.348 ^{***} (.000)	.332 ^{***} (.000)	.251 ^{***} (.001)		.050 ^{***} (.000)	.048 ^{***} (.000)	.033 ^{***} (.003)
GDP per capita (log values)		.153 ^{**} (.019)	.197 ^{**} (.044)	-.078 (.440)		.021 ^{**} (.020)	.027 ^{**} (.050)	-.010 (.434)
<i>Political Rights</i> index			.021 (.708)	.016 (.635)			.003 (.708)	.002 (.635)
<i>PR</i>			-.113 (.496)	-.035 (.747)			-.016 (.496)	-.004 (.748)
<i>Presidential</i> <i>system</i>			.170 (.554)	.020 (.904)			.023 (.551)	.002 (.904)
Religion Fixed Effects			Yes	Yes			Yes	Yes
Private credit to GDP (log values)				.172 ^{**} (.039)				.021 ^{**} (.037)
Government owned firm				.474 ^{***} (.003)				.069 ^{***} (.010)
Population (log values)				-.279 ^{***} (.000)				-.035 ^{***} (.000)
Corruption (ICRG index)				-.036 (.594)				-.005 (.594)
Firm is an exporter				-.033 (.606)				-.004 (.606)
Firm operates in a foreign country				-.035 (.662)				-.004 (.659)
Ownership type fixed effects				Yes				Yes
Creditor's rights index				-.160 ^{***} (.000)				-.020 ^{***} (.000)
<i>Regulation</i> (Heritage Foundation)				-.187 ^{**} (.025)				-.024 ^{**} (.022)
Predicted probability					.169	.164	.167	.148
Sample Size (countries)	4972 (50)	4831 (49)	4625 (47)	4034 (46)	4972 (50)	4831 (49)	4625 (47)	4034 (46)

1) p-values in brackets; all standard errors are clustered on country; significance level is denoted by *** (1% or less), ** (5% or less) and * (10% or less). Religion fixed effects are dummies indicating the main religion of the country (Muslim, Catholic, Protestant and Others). Sample size varies due to missing observations.

2) Columns 1-4 report the log odds ratios from the ordered logit specification. Columns 5-8 show the corresponding marginal effects (evaluated at the mean value of explanatory variables) for the highest value of the dependent variable (information most easily available).