

Some Evidence of Regulatory Convergence

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Abstract We find some evidence of regulatory convergence in four distinct areas of business activity over the 2005-2019 period. This convergence is most pronounced for countries in the French and German civil law tradition.

Introduction

Pigou (1938) posits that markets exhibit failures ranging from monopoly power to externalities. Governments counter these failures through regulation. However, previous studies document significant differences in the regulation of business activity across countries according to the level of income and the legal origin (La Porta et al 1998). These studies cover a wide spectrum of regulation, ranging from regulation on securities markets, to business entry and operations, corporate taxation, and property registration. Income per capita tends to enter these sets of analyses negatively and significantly: poorer countries regulate more. The direction of causation is unclear, however. Countries may be poor because regulation is hostile to business activity.

Previous studies also find that countries of French, German, and sometimes Scandinavian civil law origin impose heavier regulation than do common law countries. These are historically shaped features of the law, which, through transplanted, have continued to manifest differences across legal families (La Porta et al. 1999).

In this paper, we find some evidence of regulatory convergence for the period 2005 to 2019. Countries with French and German legal origin reduce the number of existing procedures faster than their comparators in the common law and Scandinavian civil law traditions. By the end of the sample period, there is no statistically meaningful difference across legal traditions in how they regulate several aspects of business activity. In contrast, there remain differences across levels of income, though we present some evidence of regulatory convergence between rich and poorer countries too.

These findings suggest that while legal tradition matters, it can be overcome with deliberate regulatory action. Three caveats are in order. First, the precise conduit for these changes is not investigated in this paper. Second, the changes that our study documents do not relate to the Civil Code itself – the main legal text organizing the functioning of society in the civil law tradition. This Code may instill permanence in the way that common law and civil law countries differ beyond the specific business regulations described in this paper. Third, there are many economies that show heterogeneity across regulations, for example lax business regulations but stringent labor or environmental regulations. All three caveats serve to suggest that the findings indicate

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convergence within a narrow regulatory area. To make broader claims we would need to investigate regulation dynamics in other databases. Finally, we choose simple comparison tests for the simplicity of presentation. The tests of convergence could be more formal, in the spirit of the income or growth convergence literatures (see, for example, Desli and Gkoulgkoutsika 2021).

2. The Data

We use a World Bank dataset of business regulations, specifically in the areas of paying corporate taxes, dealing with building permits, registering property and starting a limited liability company. The data span fifteen years, 2005 to 2019, covering 173 economies. A reform is defined as a change in the number of required procedures that reduces the cost of doing business, by making it faster, easier, cheaper to conduct business (Djankov 2016). We narrow the previous definition of regulatory reform used by the World Bank, by limiting it to cases of reduction in the number of required regulatory procedures. This is an important distinction. If the implementation of regulation becomes more efficient (faster or cheaper) due to the use of new technology or better bureaucratic organization, this eases the burden on the entrepreneur but does not constitute regulatory change. If, in contrast, the procedure is scrapped altogether, we count this as evidence of deregulation.

We study four areas of regulation – paying corporate taxes, obtaining building permits, registering property and starting a business - as they have been subject to previous research using the same dataset (Djankov et al 2002; 2010; 2022; World Bank 2020). We can compare our findings with the earlier results in these studies that find significant differences in regulation across countries at different levels of income and coming from different legal traditions.

When we split the sample into upper and lower halves based on initial (2005) income per capita, we see that poorer countries saw more change, perhaps because they started from a state of over-regulation or because technology was not as easily available (Figure 1a). This seems to be the case for the procedures to register property, start a business and pay taxes. The procedures for obtaining building permits also fall, but at a similar pace between richer and poorer countries. Still, by the end of the sample period (2019) richer countries had fewer regulatory procedures than did poorer countries in all four areas of business regulation. This can be interpreted as evidence for limited convergence.

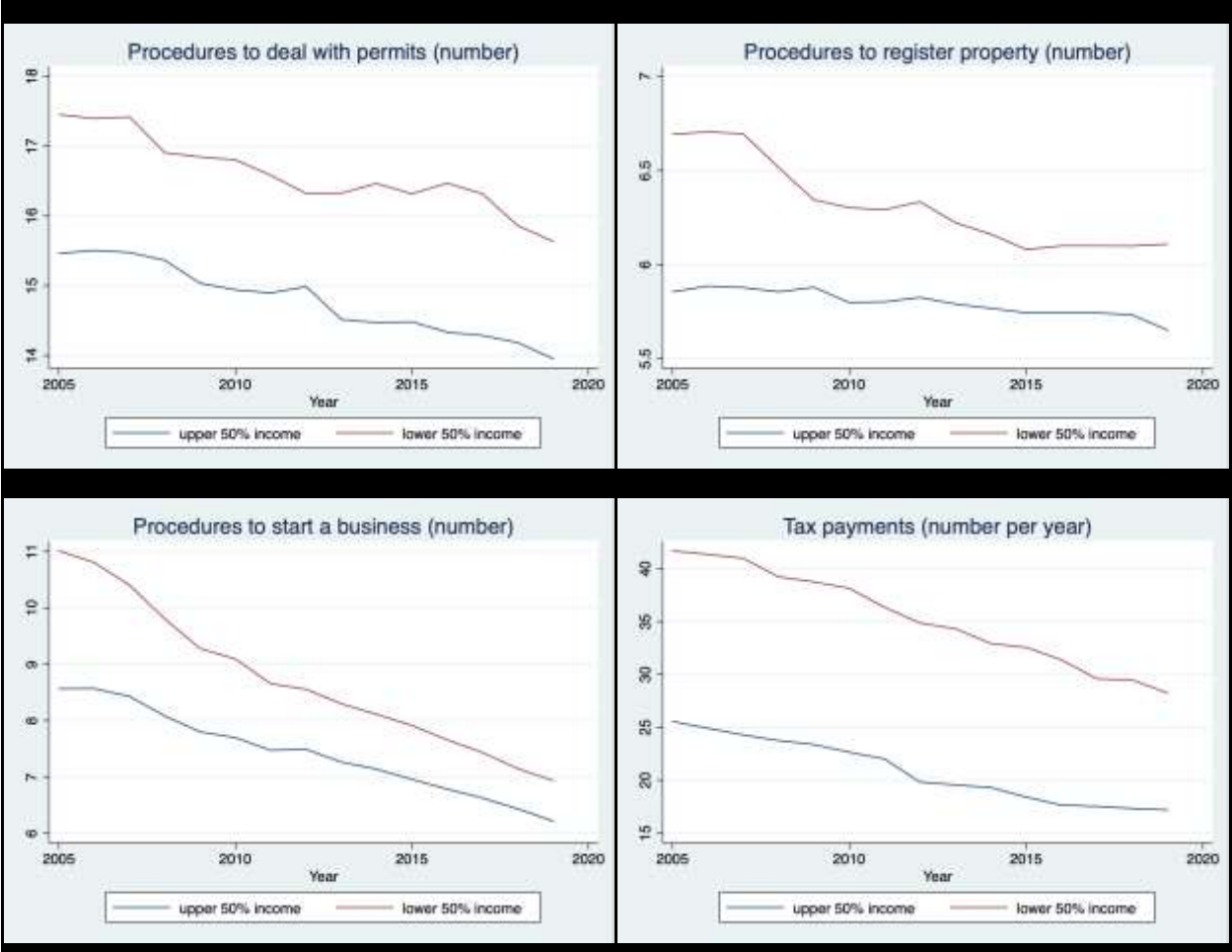
In contrast, we document strong convergence across legal origins in all four areas of business regulation. The number of procedures to start a business and obtain building permits converge to being near-identical between common and civil law countries by 2019. In the areas of registering property and paying taxes, the number of procedures is higher in civil law countries at the start of the sample period and falls so dramatically faster that by 2019 it is lower than in the group of common law countries (Figure 1b).

These figures are suggestive of significant trends in the way that countries regulate business activity. The overall trend towards less regulation can be due to a variety of reasons: a changed view of the state's capacity to intervene in economic life or the advent of technology in public services that makes regulation obsolete. Rather than attempting to answer these questions, we

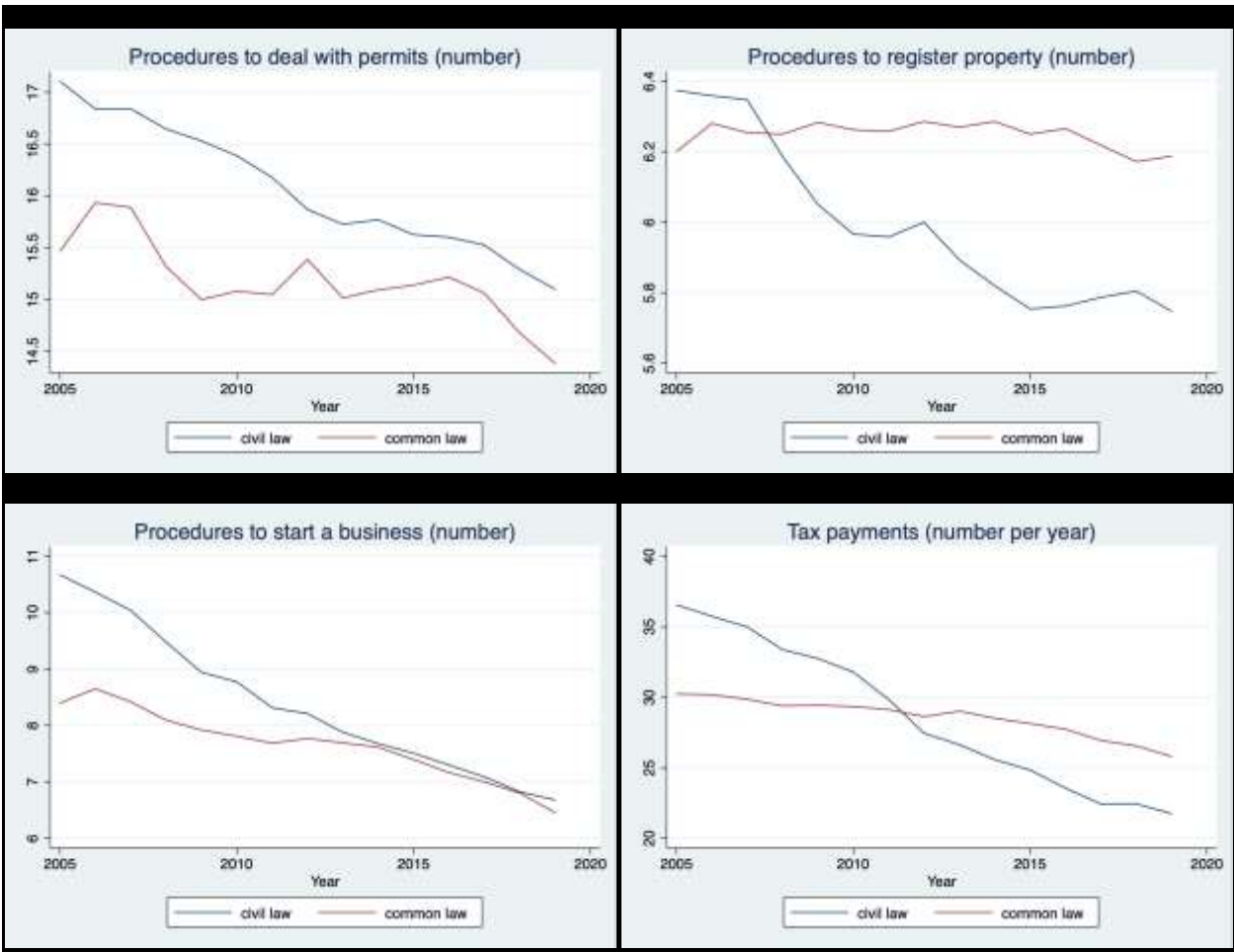
focus our analysis on the differences in regulatory change across country groups in this fifteen-year span.

Figure 1: The Reduction in Procedures Takes Place Across the Sample

a. by Level of Income



b. by Legal Origin



3. Testing Regulatory Convergence

We next use the beginning and end sample-period data – for the year 2005 and 2019, respectively – to test the hypothesis of regulatory convergence over time.

Table 1a shows evidence of convergence between richer and poorer countries in the number of procedures for registering property and starting a business. This convergence is manifested in the increased probability of the upper and lower halves of the sample having equal means by the end of the sample period. In particular, the probability of the means being equal goes up from 0.016 to 0.158 for property procedures; and from 0 to 0.093 for entry procedures. These are small but notable changes. In contrast, there is no convergence in the number of procedures to obtain building permits or pay taxes. Both probabilities remain at zero. These tests are consistent with the pictorial evidence in the previous section: poorer countries have cut regulation faster than have richer countries, but there is still a significant gap between these two groups. Rich countries regulate less in all four areas of business activity.

We perform the same tests dividing the sample countries by legal origin. About a third of the sample countries belong to the common law (English) tradition, while the remaining two thirds are civil law countries (Table 1b). In the latter group, we will later distinguish among French, German and Scandinavian legal traditions.

The probability tests show that in all four areas of business regulation there is evidence of convergence. In permitting and entry regulation, civil law countries come close to common law countries in terms of the number of procedures. The probability that the groups' means are equal increases from 0.127 to 0.231 and from 0 to 0.615, respectively. In property and tax procedures, civil law countries actually surpass common law ones in having fewer procedures, thus displaying even stronger convergence.

Table 1 Tests of Regulatory Convergence

a. by Income per Capita

Year	2005				2019			
Group by GNI (2005)	Upper half (mean)	Lower half (mean)	t test of difference in means	probability of upper half = lower half	Upper half (mean)	Lower half (mean)	t test of difference in means	probability of upper half = lower half
Permit procedures	15.5	17.5	1.974	0.050	14.0	15.6	3.024	0.003
Property procedures	5.9	6.7	2.434	0.016	5.7	6.1	1.417	0.158
Entry procedures	8.6	11.0	5.144	0.000	6.2	6.9	1.691	0.093
Tax procedures	25.6	41.7	5.245	0.000	17.2	28.3	5.049	0.000

b. by Legal Origin

Year	2005				2019			
Legal tradition	Common law	Civil law	t test of difference in means	probability of common law = civil law	Common law	Civil law	t test of difference in means	probability of common law = civil law
Permit procedures	15.5	17.1	1.535	0.127	14.4	15.1	1.203	0.231
Property procedures	6.2	6.4	0.468	0.640	6.2	5.7	-1.294	0.197
Entry procedures	8.4	10.7	4.460	0.000	6.5	6.7	0.504	0.615
Tax procedures	30.2	36.6	1.828	0.069	25.8	21.7	-1.665	0.098

We next use regression analysis to test the robustness of these results, also distinguishing across civil law traditions (Table 2). Lower-income countries see a bigger reduction in the number of procedures across all four areas of business activity, albeit these results are statistically significant only in the case of entry procedures (columns 7 and 9). The pattern, however, is towards convergence. In all eight specifications, the partial correlation between the reduction in the number of procedures and income per capita is negative: poorer countries deregulate more.

Countries in the civil law tradition also experienced larger declines in the number of procedures in all four areas. These findings are statistically significant for countries in the French legal tradition for the reduction in procedures to register property, start a business, and pay taxes, even after accounting for income per capita (columns 3, 9 and 12, respectively). In the case of obtaining construction permits the coefficient has the right sign but lacks statistical significance (columns 5 and 6). The coefficients on German legal origin display the same pattern of statistical significance. Countries in the Scandinavian legal tradition display mixed results: sometimes they reduce procedures faster than do common law countries – for example, in registering property – while for dealing with permits and starting a business they have negative and sometimes statistically significant coefficients. The small sample size (5 countries) may explain these unstable results.

The economic size of these changes is notable as well. The average country in the French legal origin group cut an additional half a procedure in registering property relative to a common law country in the sample. Similarly, German legal origin countries had on average one more procedure being eliminated between 2005 and 2019 than did common law origin ones. For the procedures to start a business, belonging to the French and German legal origins implies that two more procedures were eliminated during the sample period in comparison to common law countries. The difference is most dramatic when it comes to the number of procedures for paying taxes: French legal tradition and German legal tradition countries on average had 10 and 19 more procedures eliminated than did their common law counterparts, respectively.

Table 2 Multivariate Regression of Deregulation from 2005 to 2019

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Decline in procedures to register property			Decline in procedures to deal with permits		
2005 log GNI Per Capita	-0.083		-0.130*	-0.072		-0.023
	(0.059)		(0.069)	(0.265)		(0.345)
French Origin		0.544***	0.483***		0.625	0.703
		(0.179)	(0.184)		(1.019)	(1.085)
German Origin		0.894**	1.084**		2.007	1.568
		(0.441)	(0.477)		(1.656)	(1.726)
Scandinavian Origin		0.744	1.110*		-1.593*	-1.529
		(0.540)	(0.578)		(0.829)	(1.071)
Constant	1.123**	0.056	1.096*	2.242	1.193	1.374
	(0.486)	(0.114)	(0.556)	(2.313)	(0.799)	(3.109)
Observations	166	169	165	167	170	166
R-squared	0.010	0.057	0.079	0.000	0.014	0.010
	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	Decline in procedures to start a business			Decline in tax payments (number per year)		
2005 log GNI Per Capita	-0.494***		-0.343*	-1.187		-1.420
	(0.161)		(0.187)	(0.758)		(0.910)
French Origin		2.439***	2.337***		9.767***	9.742***
		(0.502)	(0.501)		(3.220)	(3.351)
German Origin		1.838**	2.139**		16.753***	18.891***
		(0.870)	(0.947)		(6.041)	(6.408)
Scandinavian Origin		-1.912***	-0.950		2.453	6.441

		(0.469)	(0.771)		(4.387)	(4.845)
Constant	7.269***	1.912***	4.652***	20.711***	3.947**	15.310*
	(1.316)	(0.372)	(1.466)	(6.869)	(1.908)	(7.946)
Observations	170	173	169	170	173	169
R-squared	0.052	0.143	0.168	0.007	0.065	0.078

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4. Conclusions

That legal history matters has been the subject of a voluminous literature in the field of law and economics, starting with the seminal work of La Porta et al (1998). This study makes a small contribution, by presenting evidence to suggest that legal history has been overcome in recent years in several areas of business regulation. This evidence can be further developed by understanding the conduits through which the convergence between legal origins has taken place; as well as the extent to which our results are representative of a broader trend towards regulatory convergence. The latter can be achieved by investigating regulation dynamics in other databases. A comprehensive study of convergence would employ more formal tests, in the spirit of the income or growth convergence literatures.

We find only weak evidence of regulatory convergence across levels of income. Whether this is due to the cost of regulatory change or is symptomatic of deeper constraints that poorer countries face in their efforts to update regulation remains an open question.

Lastly, the evidence on the declining number of regulatory procedures across legal origins and income groups might suggest that countries are finding new ways to deal with market failures, which is presumably the reason that such regulations were implemented in the first place.

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