

The Legal Origins of Corporate Social Responsibility

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- 1 Intro
- 2 Literature Review
- 3 Data
- 4 Results
- 5 Interpretation
- 6 Robustness Checks
- 7 Conclusions

Motivation and Contribution

- The legal origin literature documents that *civil* and *common* law traditions have different impact on rules and economic outcomes.
- So far, most of the literature has focused on the nexus between corporate social responsibility (CSR) and corporate performance.
- Few empirical contributions analyze how different legal cultures affect CSR choices around the world.
- We contribute to the existing literature by investigating the relationship between CSR and legal origins.

Main Results

Consistently with the main differences in historical and legal backgrounds (net of industry specific effects):

- 1 Common law origin has a significant and positive impact on the Corporate Governance and Community Involvement domains;
- 2 French legal tradition of civil law has a significant and positive impact on the Human Resources domain;
- 3 The lack of observable differences in the Environmental domain can be explained by firms' progressive convergence to industry sustainability standards.

Legal Origin Literature

Historical origins of domestic legal systems (two main roots: civil and common law) deeply affect legal rules, regulatory practices and economic outcomes (La Porta et al., 2008).

Due to these heterogeneous historical roots two markedly different cultures originated from civil and common law, with state control prevailing in the first and support to private outcomes in the second:

- 1 In the dilemma between addressing market failure with regulation and avoiding state abuse, civil law is more oriented toward the former and common law toward the latter (Djankov et al., 2003);
- 2 Civil law is "policy implementing", while common law is "dispute resolving" (Damaska, 1986).

Legal Origin Literature

The legal origin literature also demonstrates that the two different cultures produce significant disparities in terms of rules and economic outcomes:

- 1 Common law countries generally have higher shareholders' and creditors' protection, and higher stock exchanges capitalization (La Porta et al., 1998 and 2008);
- 2 Civil law countries have higher government ownership and regulation than the Common law which are characterized in turn by greater independence of the judicial power with better contract enforcement as well as security of property rights.

How these different institutional features rooted in differences in legal origins translate into CSR characteristics?

Research Hypotheses

Which CSR domains are correlated with civil and which with common law?

Based on our conjecture, we expect:

- 1 Common law countries have higher CSR scores in the Corporate Governance domain (which is traditionally oriented to promote shareholders' wellbeing);
- 2 Common law countries have higher CSR scores in the Community Involvement domain (due to the two-step culture of profit maximization followed by philanthropic donations typical of the Anglo-Saxon culture described in the section above);
- 3 Civil law countries (and, more specifically, the French tradition) have higher scores in the CSR labour domain (Human Resources) due to their cultural traditions where law rules in favour of workers are higher and shareholders' protection lower.

Finally, we want to address whether and in which domains there is convergence between civil and common law countries in CSR ratings (benchmarking practices and CSR standards).

Data Source

Data comes from three main sources:

- Data on CSR scores at company level are from the VIGEO world dataset. CSR scores are defined on six domains: Human Resources, Environment, Business Behavior, Corporate Governance, Community Involvement, and Human Rights;
- Stock price and size at company level are from DATASTREAM;
- Information on legal origins is taken from La Porta et al. (2008) paper.

The time period is 2003-2013; the total number of observations are 8137 with 1834 unique companies.

Variables Definition by Legal Origin

COMMON LAW	CIVIL LAW		
<i>English</i>	<i>French</i>	<i>Scandinavian</i>	<i>German</i>
Australia, Canada, Hong-Kong, Ireland, New Zealand Singapore, UK, US	Belgium, France, Portugal, Greece, Italy, Spain, Netherlands	Denmark, Finland, Sweden, Norway	Austria, Bermuda, China, Luxembourg, Germany, Iceland Japan, Russia, Switzerland

Variables Definition by CSR domains

In each domain d , the score for company i in industry j , FS_{ijd} , is computed as follows:

$$FS_{ijd} = \frac{\sum_k n_{ijk} w_{jdk}}{W_{jd}}$$

where, n_{ijk} is the score assigned in the driver k to the firm i in industry j which goes from 0 to 100; and w_{jdk} is the weight (going from 1 to 3) assigned to the driver k in industry j ; W_{jd} is the sum of all the drivers' weights activated in each domain d .

Sector-specific weights w_{jdk} are computed by VIGEO taking into account the relative difficulty of each specific industry j in implementing CSR standards in each specific sustainability drivers k .

The weighted sum across all the domains defines the Overall score - OS_{ij} - for firm i in industry j as follows:

$$OS_{ij} = \frac{\sum_d FS_{ijd} W_{jd}}{W_j}$$

Descriptive Statistics

Table: CSR, Legal Origin, and Control Variables

Variable	Obs.	Mean	Std. Dev.	[95% Conf. Interval]		Min	Max
<i>CSR score</i>							
Overall Score	7000	36.064	12.301	35.378	36.751	4	77
Human resources	8137	28.99	17.646	28.029	29.951	0	84
Environment	8137	31.352	18.381	30.357	32.348	0	87
Business Behaviour	8137	38.892	13.275	38.281	39.504	4	82
Corporate governance	8137	46.239	17.078	45.392	47.087	1	94
Community involvement	8137	36.064	18.547	35.086	37.041	0	96
Human rights	7000	39.391	14.422	38.619	40.163	3	91
<i>Legal Origin</i>							
Civil Law	8135	0.52	0.495	0.491	0.548	0	1
English	8137	0.48	0.495	0.452	0.509	0	1
French	8137	0.229	0.453	0.203	0.255	0	1
German	8137	0.225	0.411	0.201	0.248	0	1
Scandinavian	8137	0.066	0.247	0.053	0.08	0	1
<i>Other variables</i>							
Total Assets / 10,000,000,000	7749	0.076	0.632	0.044	0.108	0	21.834
GDP (per capita, PPP) /1,000	8135	38.857	8.095	38.451	39.263	6.781	81.104
G/GDP	8135	43.782	7.048	43.391	44.173	14.432	64.902

Descriptive Statistics

Table: Mean CSR Score by Legal Origin

A) Mean CSR Score by Legal Origin							
Legal Origin	Overall score	Human Res.	Environment	Business Behavior	Corporate Governance	Community Involvement	Human Rights
ENGLISH	35.794 (10.989)	24.554 (14.282)	29.842 (17.874)	39.150 (12.663)	55.757 (13.002)	36.996 (18.398)	37.298 (12.625)
FRENCH	40.097 (12.856)	43.340 (16.052)	39.334 (17.369)	44.560 (13.396)	43.557 (13.819)	44.566 (17.556)	44.625 (15.326)
SCANDINAVIAN	36.845 (11.229)	35.269 (15.959)	34.771 (18.285)	40.741 (13.167)	44.399 (12.381)	32.718 (17.689)	42.855 (14.847)
GERMAN	32.120 (13.320)	30.363 (18.088)	34.356 (18.757)	38.013 (13.156)	32.581 (18.324)	33.266 (17.953)	37.501 (15.362)
COMMON LAW	35.800 (10.989)	24.555 (14.284)	29.849 (17.877)	39.162 (12.656)	55.763 (13.002)	36.998 (18.395)	37.303 (12.624)
CIVIL LAW	36.239 (13.387)	37.494 (17.908)	36.923 (18.173)	41.639 (13.625)	39.495 (16.451)	38.922 (18.618)	41.327 (15.644)
B) Test of Mean CSR Score by Legal Origin (t-statistics)							
Common vs. Civil	-3.954***	-15.772***	-6.957***	-5.771***	17.305***	-2.121***	-8.974***
UK vs. French	-4.978***	-17.315***	-7.273***	-6.865***	15.273***	-6.277***	-8.371***
UK vs. German	-1.306*	-9.713***	-5.466***	-2.664***	15.436***	0.897	-6.020***
UK vs. Scandian.	-2.622***	-10.110***	-3.436***	-3.541***	9.707***	3.280***	-7.783***
French vs. German	3.257***	5.595***	0.695	3.752***	3.023***	6.943***	1.555*
French vs. Scandian.	1.648**	3.901***	2.425***	2.018***	-2.846***	8.789***	-0.843
German vs. Scandian.	1.313*	1.051	-1.532*	1.195	4.983***	-2.428***	2.071**

Std. dev. are reported in parentheses; * Significant at the 1 % level; ** Significant at the 5 % level; *** Significant at the 10 % level

Descriptive Statistics

Table: Mean Deviations from Industry Average CSR by Legal Origin

A) Mean deviations from industry average CSR by legal origin							
Legal Origin	Overall score	Human Res.	Environment	Business Behavior	Corporate Governance	Community Involvement	Human Rights
ENGLISH	1.095 (8.317)	-0.895 (9.756)	0.459 (13.344)	0.283 (9.811)	5.869 (12.026)	1.221 (13.776)	-0.225 (9.685)
FRENCH	-0.007 (10.152)	2.056 (12.673)	-0.622 (13.076)	0.294 (10.207)	-3.879 (12.303)	0.692 (14.332)	0.986 (12.523)
SCANDINAVIAN	-2.215 (9.766)	-1.206 (12.728)	-1.316 (14.113)	-0.808 (11.138)	-4.033 (11.360)	-5.945 (15.152)	0.156 (12.741)
GERMAN	-1.650 (9.206)	-0.587 (11.625)	0.311 (13.744)	-0.714 (9.547)	-5.351 (11.572)	-1.566 (12.520)	-0.575 (11.230)
COMMON LAW	1.100 (8.316)	-0.894 (9.755)	0.468 (13.342)	0.295 (9.801)	5.863 (12.027)	1.224 (13.777)	-0.220 (9.684)
CIVIL LAW	-1.002 (9.744)	0.679 (12.371)	-0.348 (13.463)	-0.215 (10.087)	-4.454 (11.943)	-0.927 (13.930)	0.206 (12.032)
B) Test of Mean Deviations from Industry Average CSR by Legal Origin (t-statistics)							
<i>Common vs. Civil Law</i>	3.9577***	-4.2117***	-0.4823	-0.2473	20.2065***	3.4607***	-1.9829**
<i>English vs. French</i>	2.5585***	-4.9788***	-0.2827	-0.8787	18.0384***	0.451	-1.7040**
<i>English vs. German</i>	4.0470***	-2.2191**	-1.0706	0.3612	15.8392***	3.8860***	-0.9515
<i>English vs. Scandinavian</i>	3.4012***	-2.4585***	-0.2366	-0.3054	11.9200***	6.6926***	-2.7290***
<i>French vs. German</i>	1.4541*	2.5351***	-0.8375	1.1751	-0.7165	3.2695***	0.7045
<i>French vs. Scandinavian</i>	1.1658	1.5031*	-0.0149	0.3781	-2.7185***	6.3368***	-1.1678
<i>German vs. Scandinavian</i>	0.105	0.611	-0.6567	0.5695	2.21098*	-3.5324***	1.7726**

Std. dev. are reported in parentheses; * Significant at the 1 % level; ** Significant at the 5 % level; *** Significant at the 10 % level

Common Law/Civil Law

Table: Random Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Overall score</i>	<i>Human Res.</i>	<i>Environment</i>	<i>Business Behavior</i>	<i>Corporate Governance</i>	<i>Community Involvement</i>	<i>Human Rights</i>
Total Assets	-0.115 (0.104)	-0.314** (0.123)	-0.217 (0.192)	0.139 (0.175)	-0.210 (0.199)	-0.102 (0.405)	0.0387 (0.131)
Civil Law	-5.842*** (1.379)	1.407 (1.806)	-2.368 (1.889)	-2.126* (1.177)	-25.37*** (2.818)	-6.911*** (1.494)	-1.060 (1.070)
GDP	0.0212 (0.0901)	0.0304 (0.0982)	-0.166 (0.105)	0.00910 (0.0764)	0.168 (0.146)	-0.0508 (0.110)	0.0538 (0.0841)
G/GDP	0.174** (0.0848)	0.183 (0.154)	0.0873 (0.107)	0.128 (0.0877)	0.173 (0.134)	0.301* (0.155)	0.257** (0.104)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses.

*** p<0.01, ** p<0.05, * p<0.1. Omitted categories: Aerospace (Industry); 2003 (Year)

Civil Law Specification

Table: Random Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Overall score</i>	<i>Human Res.</i>	<i>Environment</i>	<i>Business Behavior</i>	<i>Corporate Governance</i>	<i>Community Involvement</i>	<i>Human Rights</i>
Total Assets	-0.0863 (0.121)	-0.235 (0.147)	-0.216 (0.188)	0.170 (0.188)	-0.172 (0.188)	-0.0779 (0.417)	0.0643 (0.141)
French Origins	-3.708* (2.119)	6.576** (2.755)	-2.067 (3.060)	-0.240 (1.871)	-23.52*** (3.036)	-4.307* (2.402)	0.516 (1.952)
Scandinavian Origins	-6.710** (2.632)	-0.396 (2.681)	-3.627 (3.303)	-2.818 (2.373)	-23.43*** (3.842)	-14.24*** (2.668)	-1.359 (2.718)
German Origins	-7.016*** (1.300)	-1.393 (1.725)	-2.279 (1.861)	-3.106** (1.237)	-26.87*** (3.085)	-7.008*** (1.193)	-1.941* (1.125)
GDP	0.0336 (0.0925)	0.0588 (0.108)	-0.150 (0.108)	0.0195 (0.0792)	0.141 (0.146)	0.0575 (0.114)	0.0585 (0.0852)
G/GDP	0.154* (0.0793)	0.125 (0.115)	0.0958 (0.108)	0.104 (0.0848)	0.120 (0.132)	0.348** (0.145)	0.234** (0.0927)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English Origins

Common Law/Civil Law: Deviation from Industry Average CSR

Table: Random Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Overall score	Human Res.	Environment	Business Behavior	Corporate Governance	Community Involvement	Human Rights
Total Assets	-0.0549 (0.119)	-0.220 (0.177)	-0.268 (0.219)	0.136 (0.225)	-0.139 (0.177)	-0.0693 (0.360)	0.0367 (0.151)
Civil Law	-5.335*** (1.248)	1.106 (1.544)	-2.772* (1.541)	-1.757 (1.085)	-22.57*** (2.867)	-5.733*** (1.091)	-0.983 (0.968)
GDP	-0.0309 (0.0834)	0.0157 (0.0923)	-0.152* (0.0914)	0.0107 (0.0823)	0.0941 (0.136)	-0.164* (0.0935)	0.0164 (0.0737)
G/GDP	0.118 (0.0864)	0.165 (0.146)	0.163* (0.0898)	0.106 (0.0815)	0.0636 (0.114)	0.106 (0.113)	0.211** (0.0906)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses.

*** p<0.01, ** p<0.05, * p<0.1. Omitted categories: Aerospace (Industry); 2003 (Year)

Civil Law Specification: Deviation from Industry Average CSR

Table: Random Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Overall score</i>	<i>Human Res.</i>	<i>Environment</i>	<i>Business Behavior</i>	<i>Corporate Governance</i>	<i>Community Involvement</i>	<i>Human Rights</i>
Total Assets	-0.0863 (0.121)	-0.235 (0.147)	-0.216 (0.188)	0.170 (0.188)	-0.172 (0.188)	-0.0779 (0.417)	0.0643 (0.141)
French Origins	-3.708* (2.119)	6.576** (2.755)	-2.067 (3.060)	-0.240 (1.871)	-23.52*** (3.036)	-4.307* (2.402)	0.516 (1.952)
Scandinavian Origins	-6.710** (2.632)	-0.396 (2.681)	-3.627 (3.303)	-2.818 (2.373)	-23.43*** (3.842)	-14.24*** (2.668)	-1.359 (2.718)
German Origins	-7.016*** (1.300)	-1.393 (1.725)	-2.279 (1.861)	-3.106** (1.237)	-26.87*** (3.085)	-7.008*** (1.193)	-1.941* (1.125)
GDP	0.0336 (0.0925)	0.0588 (0.108)	-0.150 (0.108)	0.0195 (0.0792)	0.141 (0.146)	0.0575 (0.114)	0.0585 (0.0852)
G/GDP	0.154* (0.0793)	0.125 (0.115)	0.0958 (0.108)	0.104 (0.0848)	0.120 (0.132)	0.348** (0.145)	0.234** (0.0927)
Industry dummies	YES	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	6,757	6,757	6,757	6,757	6,757	6,757	6,757
Number of Countries	27	27	27	27	27	27	27
Number of Firms	1,834	1,834	1,834	1,834	1,834	1,834	1,834

Robust standard errors clustered at country level are reported in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Omitted categories: Aerospace (Industry); 2003 (Year); English origins

Common Law/Civil Law: CSR Convergence

Table: CSR Convergence

	(1) <i>Overall score</i>	(2) <i>Human Res.</i>	(3) <i>Environment</i>	(4) <i>Business Behavior</i>	(5) <i>Corporate Governance</i>	(6) <i>Community Involvement</i>	(7) <i>Human Rights</i>
Total Assets	-0.0210*** (0.00517)	-0.0156* (0.00796)	-0.0882*** (0.0129)	-0.0165 (0.0161)	-0.00167 (0.00255)	-0.0219 (0.0153)	-0.00966** (0.00372)
Civil Law	0.0773** (0.0345)	0.234*** (0.0348)	-0.0890 (0.225)	0.0781* (0.0437)	-0.383*** (0.0660)	0.323** (0.137)	0.169*** (0.0402)
GDP	-0.00301 (0.00332)	0.000322 (0.00321)	0.0132 (0.0171)	-0.00379 (0.00291)	0.00474 (0.00306)	0.000675 (0.0112)	-0.00219 (0.00384)
G/GDP	0.00189 (0.00285)	0.00745* (0.00360)	0.00751 (0.0131)	-0.00563 (0.00331)	0.00140 (0.00391)	-0.0392** (0.0172)	-0.000361 (0.00223)
Score (03-05)	-0.0255*** (0.00140)	-0.0187*** (0.00202)	-0.0446*** (0.00756)	-0.0230*** (0.00266)	-0.0220*** (0.00212)	-0.0372** (0.0165)	-0.0167*** (0.000953)
D. 2006-2007	-0.0155 (0.0230)	-0.0337* (0.0181)	-0.0879 (0.0838)	-0.0868 (0.0954)	-0.0662 (0.0594)	0.0765 (0.0975)	-0.0438 (0.0421)
D. 2008-2009	-0.0127 (0.0273)	-0.0373* (0.0193)	-0.115 (0.131)	-0.0631 (0.104)	-0.0812 (0.0634)	0.186 (0.119)	-0.0316 (0.0449)
D. 2010-2011	-0.0182 (0.0296)	-0.0488** (0.0224)	-0.149 (0.169)	-0.0570 (0.106)	-0.0802 (0.0688)	0.246* (0.141)	-0.0467 (0.0484)
D. 2012-2013	-0.0124 (0.0315)	-0.0529** (0.0240)	-0.184 (0.185)	-0.0522 (0.100)	-0.0968 (0.0661)	0.173 (0.131)	-0.0253 (0.0484)
Industry d.	YES	YES	YES	YES	YES	YES	YES
Obs.	765	774	768	774	774	773	765

Robust standard errors clustered by country. Omitted cat.: Aerospace (Industry); 2003-2005 (Year)

Civil Law Specification: CSR Convergence

Table: CSR Convergence

	(1) <i>Overall score</i>	(2) <i>Human Res.</i>	(3) <i>Environment</i>	(4) <i>Business Behavior</i>	(5) <i>Corporate Governance</i>	(6) <i>Community Involvement</i>	(7) <i>Human Rights</i>
Total Assets	-0.0199*** (0.00534)	-0.0145* (0.00794)	-0.0867*** (0.0135)	-0.0163 (0.0161)	-0.00168 (0.00254)	-0.0197 (0.0155)	-0.0101** (0.00389)
French	0.149*** (0.0355)	0.293*** (0.0467)	-0.0683 (0.317)	0.112* (0.0625)	-0.405*** (0.0802)	0.382** (0.157)	0.148** (0.0557)
Scandinavian	-0.0255 (0.0606)	0.0633 (0.0547)	-0.340 (0.351)	0.0995 (0.0594)	-0.410*** (0.0967)	-0.0115 (0.163)	0.225*** (0.0643)
German	0.0243 (0.0289)	0.203*** (0.0203)	-0.0669 (0.155)	0.0423 (0.0418)	-0.360*** (0.0695)	0.310 (0.268)	0.182*** (0.0415)
GDP	-0.00124 (0.00219)	0.00310 (0.00219)	0.0170 (0.0195)	-0.00398 (0.00288)	0.00504 (0.00310)	0.00591 (0.0134)	-0.00308 (0.00372)
G/GDP	-0.00159 (0.00262)	0.00611 (0.00353)	0.0104 (0.0216)	-0.00842* (0.00417)	0.00333 (0.00422)	-0.0381** (0.0149)	0.000331 (0.00398)
Score (03-05)	-0.0253*** (0.00148)	-0.0188*** (0.00203)	-0.0442*** (0.00762)	-0.0230*** (0.00263)	-0.0220*** (0.00215)	-0.0375** (0.0165)	-0.0167*** (0.000989)
D. 2006-2007	-0.0213 (0.0289)	-0.0485** (0.0226)	-0.114 (0.108)	-0.0814 (0.0949)	-0.0708 (0.0583)	0.0433 (0.0875)	-0.0392 (0.0409)
D. 2008-2009	-0.0175 (0.0340)	-0.0566** (0.0264)	-0.155 (0.171)	-0.0530 (0.104)	-0.0896 (0.0621)	0.139 (0.109)	-0.0258 (0.0457)
D. 2010-2011	-0.0141 (0.0360)	-0.0648** (0.0301)	-0.197 (0.233)	-0.0396 (0.107)	-0.0936 (0.0673)	0.196 (0.127)	-0.0426 (0.0538)
D. 2012-2013	-0.0150 (0.0346)	-0.0748** (0.0325)	-0.235 (0.242)	-0.0377 (0.0992)	-0.108 (0.0653)	0.115 (0.127)	-0.0191 (0.0527)
Industry d.	YES	YES	YES	YES	YES	YES	YES
Obs.	765	774	768	774	774	773	765

Robust standard errors clustered by country. Omitted cat.: Aerospace (Industry); 2003-2005 (Year); English origins

CSR Convergence

The absence of legal origin influence on the environmental domains.

- We explain this "non result" showing that it is actually the outcome of a remarkable process of convergence between the two legal origin groups;
- We document that convergence actually occurs in all domains but it cancels out legal origin effects only in the Environment and in the Business Behavior domains.

We interpret this last evidence in three ways:

- 1 Globalization reduces the influence of country of origin effects (producing convergence both within and between legal origin areas);
- 2 In some specific domains, such as that of environmental sustainability, the emergence of a global social norm (probably fostered by the creation and generalized voluntary adoption of some international standards) rapidly reduced differences among corporations coming from different legal cultures;
- 3 The increased use of benchmarking practices reinforces processes of creation of global social norms around commonly accepted environmental standards.

Further research in this direction is welcome and may significantly contribute to enrich this field of the literature.

Mundlak Correction

A problem which usually arises when running the *Standard Linear Random Effects Model* concerns the assumption of zero correlation between the firm characteristics v_i and all the other regressors.

If this assumption can be realistic with respect to the legal origin variables, it might be posed under discussion when considering the other regressors.

We cannot solve the problem with a fixed effect model since the effect of the (time-invariant) main variable of interest (*Legal Origin*) would be absorbed in firm-specific intercepts.

We implement the Mundlak (1978)'s solution re-estimating the random effect model with the addition of group-means of the time variant variables *GDP*, *G/GDP* and *TotalAssets*.

Attrition Bias

Another potential bias in our estimates arising from the sample composition of the VIGEO dataset derives from non-random attrition since the probability firms enter and exit our panel may depend on observable and/or unobservable factors possibly correlated with the main variable of interest (the CSR scores).

In order to reduce this potential bias in the main estimates:

- 1 we estimate the firms' attrition probability controlling for year, sector and country effects with the addition of the country *per-capita GDP* and a proxy for the *difficulty of doing business* in a given country (i.e. the number of procedures necessary to start up a new business);
- 2 we use the predicted attrition probabilities to (inversely) weight each observation in the main equation – i.e. the weights are constructed as $1/p(A_i)$, where $p(A_i)$ is the estimated probability of attrition for each firm. With such a weighting method, each observation in the main equation is inversely weighted by its attrition probability so that less importance in the estimation is given to those firms more likely to attrite.

Weighted Least Square estimates do not significantly differ from the pooled-OLS. We can conclude that firms' non-random attrition is not likely to be the main driver of our results.

Conclusions

- Corporate social responsibility is an emerging and growing phenomenon in contemporary globally integrated economies.
- So far, there isn't any theoretical and empirical analysis on the impact of different legal origins on the implementation of CSR practices in the different domains.
- Two different law traditions (Civil/Common) may have intrinsic characteristics which justify different patterns of adoption of CSR practices:
 - ① Common Law origin is much more oriented toward shareholder protection concerning shareholder rights and corporate philanthropy;
 - ② Civil Law origin (French family) is much more oriented toward worker rights;
 - ③ Absence of legal origin influence on the environmental issue is mainly due to the convergence between the two legal origin groups.

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