

Supplementary Materials for “Corporate social responsibility in a competitive business environment”

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Appendix Table A: CSR summary statistics, by survey year

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All	Compliers	Non Compliers	2011	2012	2013	2014
CSR index (0-12), mean	2.111	2.447	1.750	2.029	2.107	2.167	2.142
CSR index A - Management (0-4), mean	1.314	1.557	1.051	1.248	1.259	1.387	1.360
CSR index B - Community (0-8), mean	0.798	0.890	0.699	0.782	0.848	0.780	0.781
A: Management							
CSR 1: Has a committee/board overseeing CSR practices?	0.431	0.543	0.311	0.375	0.383	0.493	0.474
CSR 2: Has a written down CSR policy?	0.747	0.818	0.670	0.734	0.738	0.758	0.756
CSR 3: Member of CSR standards groups?	0.029	0.045	0.011	0.028	0.026	0.037	0.025
CSR 4: Has been awarded CSR type certifications or awards?	0.107	0.151	0.059	0.111	0.112	0.099	0.105
B: Community							
CSR 5: Environmental Protection	0.257	0.265	0.248	0.260	0.272	0.247	0.247
CSR 6: Education	0.087	0.106	0.066	0.079	0.093	0.087	0.088
CSR 7: Infrastructure Development	0.079	0.080	0.079	0.082	0.082	0.075	0.078
CSR 8: Health Care services	0.051	0.067	0.033	0.047	0.054	0.052	0.049
CSR 9: Youth Development	0.033	0.043	0.022	0.031	0.033	0.034	0.034
CSR 10: Poverty Alleviation	0.206	0.224	0.186	0.200	0.223	0.201	0.200
CSR 11: Local Heritage	0.032	0.031	0.033	0.030	0.036	0.030	0.033
CSR 12: Sporting events	0.053	0.073	0.032	0.052	0.055	0.054	0.052
Number of observations	20,740	10,756	9,984	5,185	5,185	5,185	5,185

Source: Authors' calculations based on CIEM et al. (2015).

Appendix Table B: Heterogeneity – Static GMM estimates

	1	2	3	4
	ALL	ALL	Domestic	State/Foreign
	Static	Static	Static	Static
	Sys-GMM	Sys-GMM	Sys-GMM	Sys-GMM
Focus variables				
CSR index A - Management	-0.0014 (0.0031)	-0.0030 (0.0031)	-0.0014 (0.0034)	-0.0024 (0.0062)
CSR index B - Community	0.0055*** (0.0020)	0.0054*** (0.0020)	0.0035* (0.0021)	0.0081* (0.0047)
Hirschman/Herfindahl Index (HHI)	-0.0980*** (0.0376)	-0.0822** (0.0365)	-0.0784 (0.0369)	-0.0804 (0.0836)
CSR(A)*HHI interaction	0.0300 (0.0243)	0.0207 (0.0235)	0.0290 (0.0248)	0.0095 (0.0507)
CSR(B)*HHI interaction	0.0231** (0.0113)	0.0210* (0.0113)	0.0192 (0.0125)	-0.0039 (0.0300)
Efficiency controls	Yes	Yes	Yes	Yes
Additional controls	No	Yes	Yes	Yes
Obs.	20,740	20,740	14,764	5,584
Firms	5,185	5,185	3,691	1,396
No of Instruments	44	50	48	50
AB test for AR(2) in first diff	0.559	0.542	0.764	0.453
Hansen OID test (p-value)	0.166	0.240	0.591	0.167
Levels exclusion (p-value)	0.045	0.076	0.576	0.033
Levels exogenous (p-value)	0.799	0.814	0.497	0.889
CSR exclusion (p-value)	0.546	0.670	0.495	0.841
CSR exogenous (p-value)	0.082	0.098	0.578	0.030
Interaction exclusion (p-value)	0.309	0.286	0.704	0.039
Interaction exogenous (p-value)	0.170	0.289	0.416	0.662
IV exclusion (p-value)	0.103	0.059	0.325	0.118
IV exogenous (p-value)	0.760	0.944	0.923	0.477

Source: Authors' calculations based on CIEM et al. (2015).

Note: Note: Dependent variable: Real revenue per employee (log). Static system GMM estimators. Twostep with Windmeijer's finite-sample correction for the two-step covariance matrix. Standard errors (reported in parenthesis). *, **, *** indicate significance at a 10 percent, 5 percent and 1 percent level, respectively.

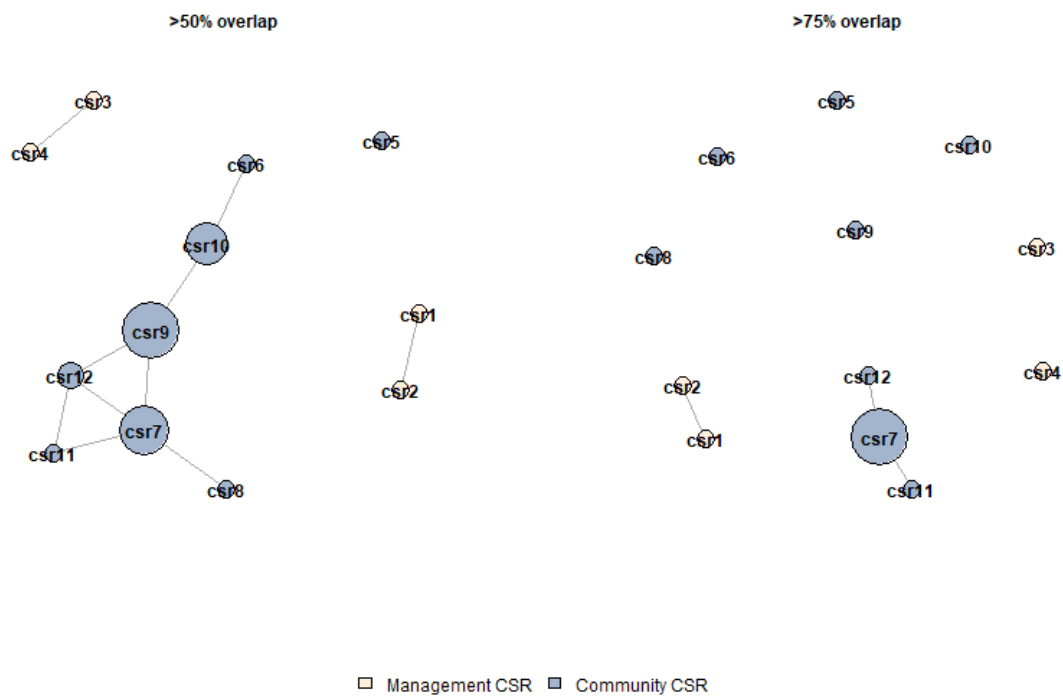
Appendix Table C: Wage share heterogeneity – OLS and Static GMM estimates

	1	2	3	4
	OLS	OLS	Static Sys-GMM	Static Sys-GMM
Focus variables				
CSR index A - Management	-0.0070** (0.0029)	0.0004 (0.0025)	-0.0017 (0.0048)	-0.0028 (0.0044)
CSR index B - Community	-0.0034* (0.0018)	-0.0050*** (0.0016)	-0.0049** (0.0025)	-0.0058** (0.0024)
Hirschman/Herfindahl Index (HHI)	-0.0357** (0.0148)	-0.0813*** (0.0130)	-0.0282* (0.0148)	-0.0727*** (0.0133)
Efficiency controls	No	Yes	No	Yes
Additional controls	Yes	Yes	Yes	Yes
Obs.	18,466	18,466	18,466	18,466
Firms	4,983	4,983	4,983	4,983
R-squared	0.081	0.247	..	..
No of Instruments	..	..	30	33
AB test for AR(2) in first diff	..	..	0.161	0.144
Hansen OID test (p-value)	..	..	0.854	0.669
Levels exclusion (p-value)	..	..	0.674	0.540
Levels exogenous (p-value)	..	..	0.846	0.660
CSR exclusion (p-value)	..	..	0.895	0.689
CSR exogenous (p-value)	..	..	0.571	0.533
IV exclusion (p-value)	..	..	0.833	0.752
IV exogenous (p-value)	..	..	0.557	0.287

Source: Authors' calculations based on CIEM et al. (2015).

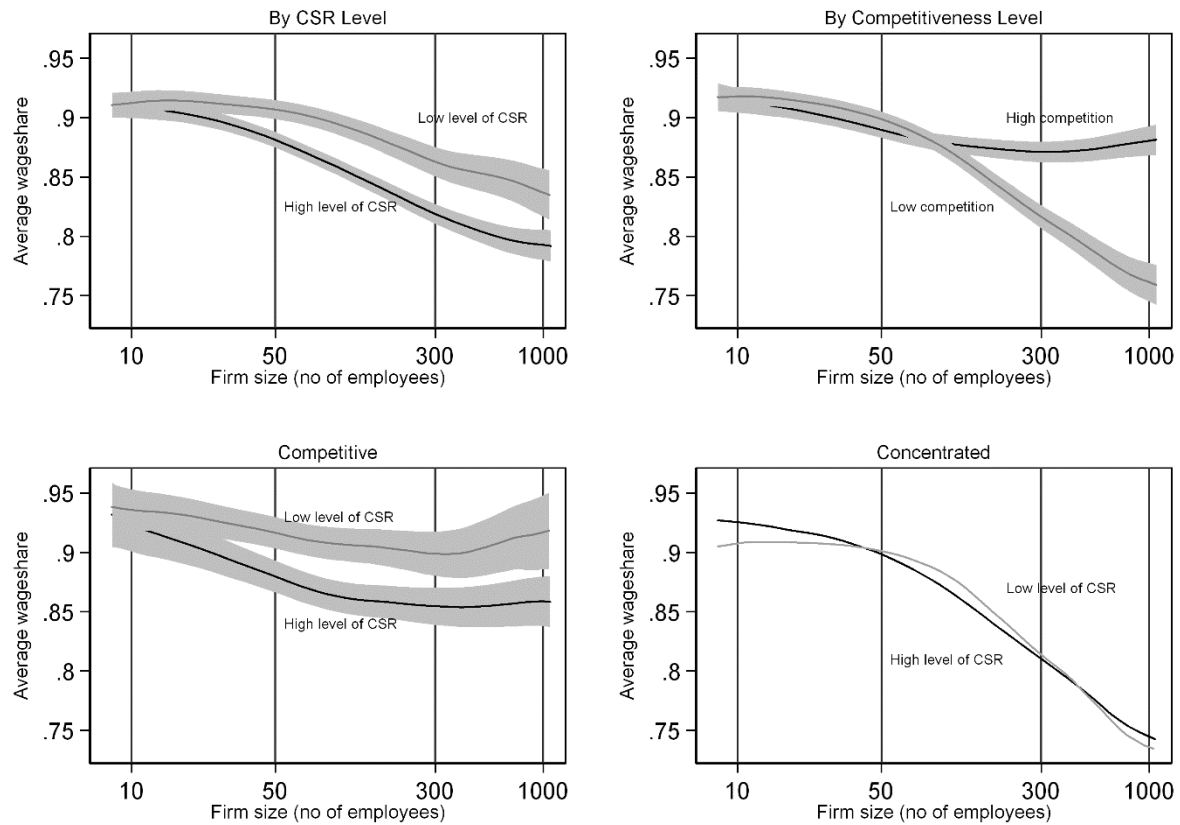
Note: Note: Dependent variable: Real revenue per employee (log). OLS and Static system GMM estimators. Twostep with Windmeijer's finite-sample correction for the two-step covariance matrix. Standard errors (reported in parenthesis). *, **, *** indicate significance at a 10 percent, 5 percent and 1 percent level, respectively.

Appendix Figure 1: CSR interlinkages



Source: Authors' calculations based on CIEM et al. (2015).

Appendix Figure 2: Labour compensation, CSR, and competition



Source: Authors' calculations based on CIEM et al. (2015).

Note: Kernel weighed local mean smoothing using the Epanechnikov kernel and a bandwidth of 0.8 Appendix Figure 2 shows the association between firm size and the average wage share (share of value added being paid out as labour compensation), split by CSR (panel A) and industry competition (panel B). The black curve is the average wage share in firms with an important level of CSR (panel A) or operating in a competitive industry (panel B) while the grey curve is the average wage share in firms with a low level of CSR and competition pressure, respectively. The shaded areas show the point-wise 90 per cent confidence intervals. The four vertical lines in the plots indicate the upper limits on the size of enterprises using the standard World Bank definition: micro (up to 10 employees), small (up to 50 employees), and medium (up to 300 employees). Starting with Panel A, we see a significant difference in wage shares being paid by firms with high and low levels of CSR. Throughout the size distribution, we find that firms more actively engaging in CSR activities tend to compensate their employees at a lower rate of total generated value added than their counterparts, which are less involved in CSR activities. Panel B of Figure 2 shows the average wage share differences between firms operating in highly competitive industries ($HHI < 20$ per cent), compared with firms in concentrated sectors ($HHI > 80$ per cent). Workers in highly competitive sectors are compensated at a relatively constant rate of value added (around 90 per cent); whereas there is a sharp decline in wage compensation shares along the firm size distribution in concentrated sectors. Panels C and D of Appendix Figure 2 show wage differences between high and low CSR firms along the industry competitiveness dimension. In competitive industries, the share of value added accruing to workers in 'low' CSR firms is at a relatively constant level, which along the firm size distribution is higher than in 'high' CSR firms. In concentrated sectors, average labour compensation shares of value added are log-linearly declining in firm size in companies with strong CSR profiles. Throughout the firm size distribution, firms less engaged in CSR activities allocate larger shares of value added to their workers, and it is noticeable in both panel C and D that the differences in labour compensation rates between high and low CSR firms are more pronounced in the medium firm size segment.