

**VARIATIONS IN THE CORPORATE SOCIAL RESPONSIBILITY-PERFORMANCE
RELATIONSHIP IN EMERGING MARKET FIRMS**

ONLINE APPENDIX

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Table A1 Results of robustness tests of the impact of CSR dimension on performance and the role of business group affiliation using alternative dependent variables, independent variables, and endogeneity controls

	Alternate dependent variable		Alternate independent variable		Endogeneity control: Two-stage least square regression	
	Dependent variable: Tobin's q		Dependent variable: ROA		Dependent variable: Industry ROA	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	3.779*** (0.715)	3.470*** (0.754)	23.090*** (3.007)	26.902*** (2.887)	1.993 (2.818)	4.691 (2.959)
Social CSR	0.156** (0.071)	0.365*** (0.130)	--	--	0.084** (0.033)	0.097*** (0.033)
Social CSR Expenditure (S-CSR Exp.)	--	--	1.125** (0.526)	1.522*** (0.501)	--	--
Governance CSR	0.043** (0.018)	0.037*** (0.012)	--	--	0.046* (0.027)	0.016*** (0.006)
Principal-Principal Conflict (PP Conflict)	--	--	0.156 (0.209)	0.912* (0.505)	--	--
Environmental CSR	-0.001 (0.001)	-0.244* (0.143)	--	--	-0.025 (0.032)	-0.248*** (0.060)
Environmental CSR Expenditure (E-CSR Exp.)	--	--	-0.972*** (0.154)	-0.629** (0.276)	--	--
Business Group (BG) Affiliation	--	0.178 (0.155)	--	2.835*** (0.701)	--	5.483*** (1.318)
Social CSR* BG Affiliation	--	0.457*** (0.151)	--	--	--	0.382*** (0.124)
S-CSR Exp. * BG Affiliation	--	--	--	2.320 (1.453)	--	--
Governance CSR* BG Affiliation	--	-0.357*** (0.131)	--	--	--	-4.192*** (1.547)
PP Conflict* BG Affiliation	--	--	--	-1.002* (0.535)	--	--
Environmental CSR* BG Affiliation	--	-0.212 (0.157)	--	--	--	-6.742*** (1.306)
E-CSR Exp.* BG Affiliation	--	--	--	-1.406*** (0.181)	--	--
Age	-0.004*** (0.001)	-0.007*** (0.002)	-0.032*** (0.007)	-0.020*** (0.007)	-0.059*** (0.013)	-0.050*** (0.014)
No. of employees	-0.013 (0.030)	0.008 (0.030)	-0.450*** (0.172)	-0.162 (0.127)	0.009 (0.246)	0.150 (0.254)
Leverage	-0.001*** (0.000)	-0.001*** (0.000)	-0.006*** (0.002)	-0.006*** (0.001)	-0.006*** (0.002)	-0.007*** (0.002)
R&D intensity	0.050** (0.022)	0.056*** (0.022)	1.024*** (0.126)	0.812*** (0.123)	0.540*** (0.117)	0.444*** (0.117)
Marketing intensity	0.011 (0.011)	0.009 (0.011)	0.012 (0.076)	-0.001 (0.076)	0.017 (0.073)	0.016 (0.076)
Investment Intensity	0.024 (0.035)	0.012 (0.037)	0.403** (0.167)	0.406** (0.162)	0.704*** (0.266)	0.834*** (0.267)
Total Diversification	0.122 (0.081)	0.166** (0.085)	0.599 (0.417)	0.760* (0.401)	-0.658 (0.795)	0.181 (0.814)
Internationalization	0.003 (0.002)	0.006** (0.003)	0.008 (0.011)	0.029** (0.013)	0.029** (0.013)	0.011 (0.013)
Strategic Ownership	0.002 (0.002)	0.001 (0.002)	0.031*** (0.010)	0.019** (0.009)	0.017 (0.014)	0.032** (0.015)
Institutional Ownership	-0.015*** (0.004)	-0.013*** (0.004)	0.000 (0.015)	-0.011 (0.014)	0.010 (0.026)	0.004 (0.028)
Media Attention	0.013*** (0.003)	0.012*** (0.003)	0.059*** (0.015)	0.056*** (0.015)	0.168*** (0.028)	0.178*** (0.027)
State Controls	Included	Included	Included	Included	Included	Included
Industry Pollution type	Included	Included	Included	Included	Included	Included
Industry Effects	Included	Included	Included	Included	--	--
Year Effects	Included	Included	Included	Included	Included	Included
Chi2 Square	4165.96***	4204.66***	2855.53***	3225.86***	397.42***	404.77***
Observations	919	919	919	919	919	919

Standard errors appear in parentheses. Significance levels: *p<0.10**p<0.05***p<0.01

Table A2: Split sample panel regression results of the impact of CSR dimension on performance and the role of policy nudges

Dependent variable: ROA								
	Model 1a	Model 1b	Model 2a	Model 2b	Model 3a	Model 3b	Model 4a	Model 4b
	After 2014	Pre 2014	After 2014	Pre 2014	After 2014	Pre 2014	After 2014	Pre 2014
Constant	30.069*** (4.215)	15.168*** (3.398)	32.478*** (4.187)	15.132*** (3.510)	30.412*** (4.311)	15.168*** (3.398)	33.968*** (4.455)	15.821*** (3.397)
Social CSR	0.081** (0.034)	0.051** (0.022)	--	--	--	--	0.067** (0.034)	0.038** (0.019)
Governance CSR	--	--	0.027*** (0.008)	0.012*** (0.003)	--	--	0.029*** (0.009)	0.025 (0.026)
Environmental CSR	--	--	--	--	-0.002 (0.009)	-0.016*** (0.002)	-0.010 (0.010)	-0.042*** (0.014)
Age	-0.026*** (0.009)	-0.027*** (0.008)	-0.028*** (0.010)	-0.022*** (0.006)	-0.026*** (0.009)	-0.027*** (0.008)	-0.028*** (0.010)	-0.028*** (0.008)
No. of employees	-0.432 (0.265)	-0.228 (0.198)	-0.580** (0.270)	-0.020 (0.175)	-0.483* (0.272)	-0.228 (0.198)	-0.691** (0.293)	-0.296 (0.203)
Leverage	-0.006*** (0.001)	-0.005** (0.002)	-0.006*** (0.001)	-0.005** (0.002)	-0.006*** (0.001)	-0.005** (0.002)	-0.006*** (0.001)	-0.004* (0.002)
R&D intensity	0.923*** (0.173)	0.981*** (0.191)	0.840*** (0.174)	0.952*** (0.181)	0.937*** (0.175)	0.981*** (0.191)	0.865*** (0.175)	1.063*** (0.199)
Marketing intensity	0.298** (0.116)	0.123* (0.071)	0.233* (0.119)	0.117* (0.071)	0.312*** (0.115)	0.123* (0.071)	0.238** (0.119)	0.113 (0.070)
Investment Intensity	0.966** (0.487)	0.726 (0.548)	1.019** (0.456)	1.018* (0.589)	1.051** (0.499)	0.726 (0.548)	0.917* (0.469)	0.780 (0.543)
Total Diversification	1.079 (0.668)	1.287** (0.554)	1.206* (0.717)	0.896** (0.438)	1.147* (0.675)	1.287** (0.554)	1.177 (0.717)	1.583*** (0.560)
Internationalization	0.079*** (0.011)	0.052*** (0.015)	0.067*** (0.013)	0.048*** (0.016)	0.078*** (0.011)	0.052*** (0.015)	0.068*** (0.013)	0.049*** (0.015)
Strategic Ownership	0.008 (0.013)	0.031*** (0.010)	-0.003 (0.015)	0.019** (0.008)	0.009 (0.013)	0.031*** (0.010)	-0.006 (0.015)	0.033*** (0.010)
Institutional Ownership	-0.009 (0.023)	0.019 (0.018)	-0.010 (0.021)	0.002 (0.012)	-0.008 (0.025)	0.019 (0.018)	-0.020 (0.024)	0.011 (0.018)
Media Attention	0.003 (0.019)	0.041** (0.019)	0.009 (0.020)	0.010 (0.011)	0.005 (0.019)	0.041** (0.019)	0.010 (0.020)	0.033*** (0.012)
State Controls	Included	Included	Included	Included	Included	Included	Included	Included
Industry Pollution type	Included	Included	Included	Included	Included	Included	Included	Included
Industry Effect	Included	Included	Included	Included	Included	Included	Included	Included
Year Effect	Included	Included	Included	Included	Included	Included	Included	Included
Chi ² Statistic	3171.43***	2246.42***	3033.07***	2736.16***	3212.60***	2238.83***	3036.01***	2275.39***
Observations	326	555	326	555	326	555	326	555

Standard errors appear in parentheses. Significance levels: *p<0.10**p<0.05***p<0.01

Table A3: Results of split sample robustness tests of the impact of CSR dimension on performance and the role of policy nudges using alternative dependent variables, independent variables, and endogeneity controls

	Alternate dependent variable		Alternate independent variable		Endogeneity control: Two stage least square regression	
	Dependent variable: Tobin's q		Dependent variable: ROA		Dependent variable: Industry ROA	
	Model 1a After 2014	Model 1b Before 2014	Model 2a After 2014	Model 2b Before 2014	Model 3a After 2014	Model 3b Before 2014
Constant	7.642*** (0.952)	4.404*** (0.474)	30.639*** (4.232)	17.013*** (3.445)	6.838 (4.460)	1.713 (5.019)
Social CSR	0.132*** (0.039)	0.065*** (0.007)	--	--	0.086** (0.040)	0.019*** (0.006)
Social CSR Expenditure	--	--	1.121*** (0.377)	0.658** (0.316)	--	--
Governance CSR	0.059*** (0.019)	0.023*** (0.008)	--	--	-0.033 (0.033)	0.039 (0.066)
Principal-Principal Conflict	--	--	0.652*** (0.252)	0.238*** (0.049)	--	--
Environmental CSR	-0.037** (0.016)	-0.041*** (0.004)	--	--	-0.032 (0.040)	-0.023** (0.012)
Environmental CSR Expenditure	--	--	-0.332** (0.152)	-1.431*** (0.206)	--	--
Age	-0.005*** (0.002)	-0.004*** (0.001)	-0.023** (0.009)	-0.024*** (0.007)	-0.048** (0.019)	0.001 (0.034)
No. of employees	-0.063** (0.030)	-0.026 (0.031)	0.313 (0.256)	-0.256 (0.191)	-0.283 (0.413)	0.308 (0.480)
Leverage	-0.001*** (0.000)	-0.001*** (0.000)	-0.007*** (0.001)	-0.005** (0.002)	-0.001 (0.002)	-0.016*** (0.003)
R&D intensity	0.087*** (0.016)	0.035 (0.029)	0.921*** (0.172)	1.074*** (0.192)	0.602*** (0.141)	1.412*** (0.219)
Marketing intensity	0.089*** (0.023)	0.025** (0.010)	0.262** (0.116)	0.092 (0.067)	0.283** (0.142)	0.150 (0.100)
Investment Intensity	0.074 (0.057)	0.241*** (0.075)	0.641 (0.485)	0.390 (0.562)	1.457*** (0.509)	0.661 (0.897)
Total Diversification	0.195* (0.115)	0.019 (0.091)	0.585 (0.677)	1.101* (0.563)	-0.777 (1.038)	0.100 (1.484)
Internationalization	0.013*** (0.004)	0.001 (0.003)	0.065*** (0.012)	0.072*** (0.013)	0.006 (0.017)	0.100*** (0.029)
Strategic Ownership	0.001 (0.003)	0.001 (0.002)	0.014 (0.010)	0.031*** (0.009)	-0.011 (0.024)	0.015 (0.020)
Institutional Ownership	-0.017*** (0.004)	-0.002 (0.003)	-0.023 (0.024)	0.010 (0.017)	0.038 (0.045)	0.030 (0.042)
Media Attention	-0.000 (0.003)	0.010*** (0.003)	0.007 (0.018)	0.035* (0.018)	0.111*** (0.036)	0.079* (0.041)
State Controls	Included	Included	Included	Included	Included	Included
Industry Pollution type	Included	Included	Included	Included	Included	Included
Industry Effect	Included	Included	Included	Included	--	--
Year Effect	Included	Included	Included	Included	Included	Included
Chi ² Statistics	3715.89***	1582.93***	3667.06***	2418.32***	233.22***	110.62***
Observations	326	555	326	555	326	555

Standard errors appear in parentheses. Significance levels: *p<0.10**p<0.05***p<0.01

Table A4: Panel regression analyses of ESG metrics on ROA in US and German firms and comparison to Indian firms¹.

	USA Model 1	Germany Model 2	Malaysia Model 3	Taiwan Model 4
Constant	6.597* (3.474)	9.439*** (0.956)	2.858*** (0.260)	11.301*** (1.138)
Social CSR	-0.080*** (0.014)	-0.038*** (0.014)	0.075*** (0.024)	0.112*** (0.012)
Governance CSR	0.021** (0.009)	0.007 (0.008)	0.043** (0.021)	0.056*** (0.018)
Environmental CSR	0.048*** (0.012)	0.065*** (0.009)	-0.046** (0.022)	-0.019*** (0.007)
Age	0.008 (0.006)	0.002 (0.003)	-0.093*** (0.024)	-0.026*** (0.004)
Number of employees	0.317** (0.124)	0.467*** (0.065)	-0.257*** (0.093)	-0.813*** (0.091)
Leverage	-0.054*** (0.008)	-0.049*** (0.005)	-0.102*** (0.021)	-0.113*** (0.009)
R&D intensity	0.001* (0.001)	0.008*** (0.000)	0.141 (0.492)	0.026*** (0.005)
Marketing intensity	0.000 (0.000)	0.008*** (0.000)	0.174*** (0.053)	0.024*** (0.004)
Investment Intensity	0.924*** (0.269)	0.318*** (0.055)	3.767** (1.824)	0.789*** (0.100)
Diversification	-0.074 (0.509)	-0.322 (0.280)	4.420*** (0.602)	1.025*** (0.237)
Internationalization	0.005 (0.007)	0.007*** (0.001)	0.011*** (0.003)	0.008*** (0.001)
Strategic Ownership	0.008 (0.014)	0.040*** (0.005)	0.005 (0.014)	0.121*** (0.008)
Institutional ownership	0.019*** (0.005)	-0.001 (0.007)	-0.004 (0.018)	0.143*** (0.011)
Media attention	0.116*** (0.027)	0.071*** (0.013)	0.045 (0.036)	0.100*** (0.017)
Industry Effects	Included	Included	Included	Included
Year Effects	Included	Included	Included	Included
Chi ² Statistics	3045.71***	3368.87***	1392.03***	6134.07***
Observations	24878	2029	659	1481

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

¹ These results are a part of a working paper analyzing CSR in developed and emerging markets.