Carbon Beta and Firm Characteristics

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We have now added a title, author and date to our first LaTeX document!

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Table 1: Carbon Beta and Firm Characteristics: log_scope1 emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.405*	-0.352*	0.107	0.0785
	(0.225)	(0.203)	(0.300)	(0.309)
bm	-0.142	-0.123	-0.387	-0.428
	(0.271)	(0.254)	(0.318)	(0.332)
leverage	-0.902	-0.775	-0.296	-0.212
	(1.507)	(1.394)	(1.113)	(1.068)
mom	4.200	4.126	-0.634	-1.063
	(2.614)	(2.594)	(1.750)	(1.762)
investa	2.384	2.163	2.921	3.640
	(4.498)	(4.678)	(2.401)	(2.638)
roe	0.0117	0.00970	0.000827	0.00943
	(0.0255)	(0.0242)	(0.0245)	(0.0240)
logppe	0.739***	0.637***	0.196	0.398
	(0.198)	(0.237)	(0.263)	(0.296)
beta	0.507**	0.512**	0.145	0.193
	(0.213)	(0.217)	(0.161)	(0.167)
volat	0.448	0.432	-0.00258	0.0395
	(0.321)	(0.332)	(0.148)	(0.170)
salesgr	-0.0935	-0.0913	-0.0655	-0.0932
	(0.0799)	(0.0783)	(0.0832)	(0.0926)
epsgr	0.00110	0.00112	0.000217	0.000246
	(0.00257)	(0.00254)	(0.00220)	(0.00222)
log_scope1		0.0598		-0.268
		(0.127)		(0.313)
Constant	-6.996	-6.795	-6.125	-6.549*
	(4.494)	(4.568)	(3.771)	(3.604)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3039	3039	3039	3039
R2-Adj	0.0553	0.0560	0.456	0.461

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Carbon Beta and Firm Characteristics: log_scope2 emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.185	-0.154	0.297	0.317
	(0.178)	(0.182)	(0.210)	(0.215)
bm	0.591	0.604	0.353	0.354
	(0.387)	(0.400)	(0.230)	(0.230)
leverage	0.507	0.371	2.269**	2.408**
	(1.206)	(1.224)	(0.934)	(1.090)
mom	3.867	3.200	-1.765	-1.916
	(2.703)	(2.632)	(1.951)	(1.915)
investa	-1.532	-1.663	1.409	1.362
	(2.842)	(3.072)	(1.685)	(1.801)
roe	0.0294*	0.0273	0.00585	0.00706
	(0.0157)	(0.0183)	(0.0158)	(0.0168)
logppe	0.322*	0.328*	0.114	0.0412
	(0.181)	(0.186)	(0.211)	(0.284)
beta	0.0221	0.0292	0.0167	0.0295
	(0.278)	(0.283)	(0.202)	(0.208)
volat	-0.103	-0.0928	-0.492**	-0.533*
	(0.483)	(0.495)	(0.235)	(0.282)
salesgr	-0.268**	-0.280**	-0.242***	-0.234***
	(0.133)	(0.129)	(0.0824)	(0.0771)
epsgr	-0.00494**	-0.00491*	-0.00169*	-0.00164*
	(0.00245)	(0.00252)	(0.000945)	(0.000915)
log_scope2		-0.0103		0.0985
		(0.129)		(0.268)
Constant	-2.418	-3.093	-8.450***	-8.545***
	(3.388)	(3.326)	(3.029)	(2.980)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2967	2945	2967	2945
R2-Adj	0.0975	0.101	0.476	0.472

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Carbon Beta and Firm Characteristics: log_total_emissions emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.349	-0.256	0.161	0.161
	(0.250)	(0.197)	(0.299)	(0.292)
bm	-0.304	-0.276	-0.370	-0.371
	(0.258)	(0.255)	(0.318)	(0.317)
leverage	-1.737	-1.055	0.782	0.777
	(1.428)	(1.336)	(1.029)	(1.026)
mom	-0.386	0.295	-4.709*	-4.712*
	(3.283)	(3.210)	(2.419)	(2.475)
investa	1.648	0.635	3.205	3.210
	(3.847)	(3.756)	(2.526)	(2.633)
roe	0.0396	0.0407	0.0299	0.0300
	(0.0266)	(0.0271)	(0.0282)	(0.0279)
logppe	0.632***	0.312	0.220	0.223
	(0.237)	(0.240)	(0.323)	(0.298)
beta	0.456*	0.488**	0.160	0.160
	(0.229)	(0.237)	(0.171)	(0.172)
volat	-0.168	-0.219	-0.382	-0.381
	(0.243)	(0.266)	(0.268)	(0.268)
salesgr	-0.236	-0.206	-0.190	-0.190
	(0.173)	(0.175)	(0.181)	(0.182)
epsgr	-0.000611	-0.000772	0.000261	0.000260
	(0.00162)	(0.00160)	(0.00156)	(0.00156)
log_total_emissions		0.146*		-0.00241
		(0.0753)		(0.133)
Constant	-5.012	-4.166	-7.527*	-7.533**
	(4.466)	4 (4.549)	(3.784)	(3.685)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3078	3078	3078	3078
R2-Adj	0.0811	0.0994	0.385	0.385

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Carbon Beta and Firm Characteristics: log_energy_consumption emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.279	-0.140	0.168	0.160
	(0.266)	(0.236)	(0.287)	(0.280)
bm	-0.112	-0.0925	-0.350	-0.353
	(0.290)	(0.281)	(0.323)	(0.327)
leverage	-0.503	0.413	-0.112	-0.196
	(1.661)	(1.688)	(1.093)	(1.043)
mom	2.761	3.057	-2.003	-2.060
	(2.705)	(2.558)	(1.803)	(1.768)
investa	5.579	4.451	4.129	4.301
	(5.585)	(5.129)	(2.898)	(2.921)
roe	0.0193	0.0188	0.00985	0.0109
	(0.0290)	(0.0279)	(0.0254)	(0.0247)
logppe	0.686***	0.331*	0.291	0.347
	(0.205)	(0.181)	(0.237)	(0.214)
beta	0.545**	0.575**	0.173	0.183
	(0.214)	(0.222)	(0.154)	(0.159)
volat	0.350	0.296	-0.0348	-0.0279
	(0.335)	(0.311)	(0.186)	(0.193)
salesgr	-0.142	-0.127	-0.130	-0.140
	(0.108)	(0.108)	(0.0990)	(0.0990)
epsgr	0.00260	0.00237	0.00166	0.00170
	(0.00299)	(0.00281)	(0.00237)	(0.00243)
log_energy_consumption		0.296***		-0.0785
		(0.108)		(0.240)
Constant	-8.495*	-8.851*	-9.368***	-9.176***
	(4.713) 5	(4.559)	(3.066)	(2.959)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3224	3224	3224	3224
R2-Adj	0.0406	0.0536	0.428	0.428

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Carbon Beta and Firm Characteristics: change_scope1 emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.645***	-0.645***	-0.0548	-0.0549
	(0.175)	(0.175)	(0.385)	(0.385)
bm	-0.322	-0.324	-0.152	-0.152
	(0.421)	(0.421)	(0.380)	(0.379)
leverage	-3.048**	-3.043**	-0.976	-0.976
	(1.354)	(1.354)	(1.358)	(1.356)
mom	-1.103	-1.143	-3.916	-3.921
	(3.484)	(3.475)	(3.303)	(3.276)
investa	-0.0435	-0.0543	1.232	1.233
	(2.748)	(2.752)	(2.468)	(2.467)
roe	0.0702***	0.0703***	0.0651**	0.0651**
	(0.0227)	(0.0228)	(0.0323)	(0.0322)
logppe	0.408**	0.405**	-0.397	-0.397
	(0.162)	(0.165)	(0.474)	(0.475)
beta	-0.0156	-0.0103	-0.461*	-0.460*
	(0.242)	(0.243)	(0.272)	(0.271)
volat	0.132	0.130	-0.145	-0.145
	(0.184)	(0.183)	(0.182)	(0.183)
salesgr	-0.193*	-0.192*	-0.0978	-0.0976
	(0.102)	(0.102)	(0.165)	(0.166)
epsgr	0.00378*	0.00377*	0.00290	0.00290
	(0.00216)	(0.00216)	(0.00204)	(0.00205)
change_scope1		1.78e-08		1.26e-09
		(2.31e-08)		(2.11e-08)
Constant	7.461	7.510	11.49**	11.49**
	(4.487)	(4.519)	(5.648)	(5.722)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2879	2879	2879	2879
R2-Adj	0.119	0.119	0.378	0.377

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Carbon Beta and Firm Characteristics: change_scope2 emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.338	-0.338	-0.669***	-0.675***
	(0.222)	(0.222)	(0.199)	(0.201)
bm	0.143	0.140	-0.0846	-0.0878
	(0.207)	(0.206)	(0.190)	(0.191)
leverage	1.486	1.466	2.085***	2.065***
	(0.955)	(0.952)	(0.774)	(0.773)
mom	2.905	2.883	2.370	2.387
	(3.344)	(3.339)	(2.023)	(2.047)
investa	-5.564**	-5.511**	0.0709	0.117
	(2.559)	(2.562)	(2.536)	(2.525)
roe	0.603**	0.599**	0.280	0.279
	(0.281)	(0.281)	(0.201)	(0.202)
logppe	0.128	0.124	0.263	0.270
	(0.207)	(0.207)	(0.220)	(0.221)
beta	-0.0158	-0.0176	0.0615	0.0499
	(0.233)	(0.233)	(0.157)	(0.159)
volat	0.406	0.400	0.178	0.172
	(0.269)	(0.267)	(0.128)	(0.124)
salesgr	0.113	0.110	0.101	0.0975
	(0.0882)	(0.0885)	(0.0742)	(0.0744)
epsgr	0.00264**	0.00264**	0.000555	0.000569
	(0.00126)	(0.00126)	(0.00105)	(0.00106)
change_scope2		0.000000766		0.00000105
		(0.00000110)		(0.000000902)
Constant	4.228	4.313	8.992**	9.000**
	(3.653)	(3.671)	(4.284)	(4.254)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2722	2722	2722	2722
R2-Adj	0.131	0.131	0.485	0.486

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Carbon Beta and Firm Characteristics: change_total_emissions emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.661**	-0.657**	2.075	2.084
	(0.319)	(0.319)	(2.405)	(2.415)
bm	0.446	0.445	1.494	1.493
	(1.130)	(1.129)	(2.014)	(2.013)
leverage	-5.033	-5.036	-0.217	-0.244
	(3.348)	(3.351)	(3.094)	(3.093)
mom	5.321	5.468	-7.098	-6.975
	(9.197)	(9.307)	(8.877)	(8.856)
investa	-5.103	-5.129	2.404	2.410
	(7.337)	(7.359)	(6.617)	(6.634)
roe	0.0764	0.0761	-0.00769	-0.00867
	(0.0510)	(0.0511)	(0.0896)	(0.0902)
logppe	-0.295	-0.305	-4.095	-4.112
	(0.876)	(0.886)	(4.129)	(4.148)
beta	-1.108	-1.096	-2.229	-2.216
	(1.269)	(1.259)	(1.962)	(1.947)
volat	-0.590	-0.624	-1.412	-1.445
	(0.862)	(0.898)	(1.524)	(1.566)
salesgr	-0.206	-0.208	-0.0351	-0.0344
	(0.328)	(0.333)	(0.458)	(0.463)
epsgr	0.00256	0.00258	0.00366	0.00368
	(0.00540)	(0.00541)	(0.00627)	(0.00629)
change_total_emissions		2.48e-14		2.58e-14
		(2.44e-14)		(2.98e-14)
Constant	23.79	23.90	43.86	43.99
	(21.11)	(21.21)	(39.08)	(39.22)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2879	2879	2879	2879
R2-Adj	0.0199	0.0196	0.0323	0.0321

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Carbon Beta and Firm Characteristics: change_energy_consumption emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.662***	-0.662***	-0.821**	-0.819**
	(0.204)	(0.204)	(0.383)	(0.384)
bm	-0.161	-0.160	-0.359	-0.356
	(0.355)	(0.354)	(0.408)	(0.409)
leverage	-1.242	-1.239	0.647	0.666
	(1.261)	(1.264)	(1.194)	(1.199)
mom	1.413	1.419	2.491	2.510
	(3.849)	(3.855)	(2.292)	(2.281)
investa	-3.133	-3.139	-0.774	-0.794
	(3.321)	(3.319)	(2.587)	(2.580)
roe	-0.00818	-0.00822	0.0363	0.0363
	(0.0279)	(0.0278)	(0.0311)	(0.0310)
logppe	0.444**	0.445**	0.522	0.522
	(0.213)	(0.213)	(0.324)	(0.324)
beta	0.303	0.300	0.188	0.185
	(0.314)	(0.314)	(0.164)	(0.165)
volat	0.138	0.138	0.00637	0.00556
	(0.187)	(0.187)	(0.115)	(0.115)
salesgr	-0.0818	-0.0817	0.0300	0.0290
	(0.128)	(0.127)	(0.106)	(0.105)
epsgr	0.00320	0.00320	0.000500	0.000511
	(0.00223)	(0.00223)	(0.00190)	(0.00190)
change_energy_consumption		-1.21e-09		-1.60e-09
		(2.64e-09)		(1.25e-09)
Constant	5.829	5.804	7.613**	7.560**
	(3.798)	(3.789)	(3.770)	(3.773)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	2853	2853	2853	2853
R2-Adj	0.212	0.212	0.678	0.678

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 9: Carbon Beta and Firm Characteristics: scope1_int emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	0.220	0.330	1.994***	1.997***
	(0.566)	(0.613)	(0.703)	(0.730)
bm	1.323	1.644	1.762**	1.771**
	(0.887)	(1.023)	(0.741)	(0.852)
leverage	-0.0330	-0.374	4.029**	3.998**
	(1.925)	(1.897)	(1.934)	(1.774)
mom	11.43**	12.20**	1.591	1.617
	(4.907)	(5.142)	(2.342)	(2.532)
investa	1.964	1.738	5.096	5.085
	(5.123)	(5.200)	(3.284)	(3.385)
roe	-0.0205	-0.0321	-0.0686	-0.0691
	(0.0788)	(0.0837)	(0.0572)	(0.0627)
logppe	0.221	0.206	-1.309**	-1.308**
	(0.433)	(0.430)	(0.585)	(0.574)
beta	0.375	0.370	-0.140	-0.134
	(0.306)	(0.313)	(0.244)	(0.208)
volat	0.110	-0.00281	-0.265	-0.267
	(0.215)	(0.236)	(0.186)	(0.199)
salesgr	0.0116	-0.0237	-0.196	-0.198
	(0.432)	(0.427)	(0.272)	(0.265)
epsgr	-0.00388	-0.00213	0.000644	0.000689
	(0.00585)	(0.00472)	(0.00380)	(0.00381)
scope1_int		0.0000380		0.00000127
		(0.0000262)		(0.0000207)
Constant	-11.90**	-14.15**	-18.79***	-18.88**
	(5.676)	(6.525)	(6.502)	(7.605)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3347	3347	3347	3347
R2-Adj	0.167	0.183	0.621	0.621

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 10: Carbon Beta and Firm Characteristics: scope2_int emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.0643	-0.0299	0.741**	0.729**
	(0.265)	(0.272)	(0.289)	(0.293)
bm	0.603**	0.674**	0.767***	0.739***
	(0.300)	(0.318)	(0.207)	(0.238)
leverage	-0.300	-0.363	0.334	0.474
	(1.424)	(1.436)	(0.867)	(0.862)
mom	3.110	3.257	-1.485	-1.558
	(3.023)	(3.031)	(2.307)	(2.361)
investa	8.204**	8.315**	8.105***	8.089***
	(3.627)	(3.565)	(2.984)	(2.929)
roe	0.0323	0.0306	0.000820	0.00192
	(0.0227)	(0.0230)	(0.0179)	(0.0183)
logppe	0.129	0.123	-0.517*	-0.525*
	(0.237)	(0.236)	(0.268)	(0.273)
beta	0.171	0.178	-0.100	-0.136
	(0.300)	(0.298)	(0.228)	(0.231)
volat	-0.183	-0.211	-0.237	-0.227
	(0.168)	(0.176)	(0.174)	(0.172)
salesgr	-0.124	-0.133	-0.300***	-0.293***
	(0.152)	(0.154)	(0.0786)	(0.0797)
epsgr	0.00000282	0.000436	0.00275***	0.00256**
	(0.00196)	(0.00176)	(0.00102)	(0.00109)
scope2_int		0.000406		-0.000234
		(0.000416)		(0.000489)
Constant	-2.695	-3.371	-6.570**	-6.122*
	(3.006)	(3.254)	(3.185)	(3.523)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3346	3346	3346	3346
R2-Adj	0.0966	0.0990	0.603	0.603

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 11: Carbon Beta and Firm Characteristics: total_emissions_int emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	0.864	0.916	3.024**	3.062**
	(0.920)	(0.924)	(1.327)	(1.337)
bm	1.835	1.845	2.727*	2.731*
	(1.505)	(1.497)	(1.442)	(1.439)
leverage	-1.166	-0.957	6.375*	6.532*
	(2.174)	(2.169)	(3.478)	(3.532)
mom	11.81	12.45	2.912	3.498
	(7.598)	(7.633)	(3.656)	(3.805)
investa	-6.427	-7.157	-2.864	-3.468
	(6.994)	(7.291)	(4.417)	(4.775)
roe	-0.115	-0.114	-0.165	-0.165
	(0.135)	(0.135)	(0.110)	(0.110)
logppe	-0.236	-0.343	-1.972*	-2.020*
	(0.718)	(0.744)	(1.089)	(1.105)
beta	0.376	0.420	-0.383	-0.338
	(0.411)	(0.416)	(0.423)	(0.416)
volat	-0.531	-0.683	-0.642*	-0.732*
	(0.465)	(0.588)	(0.329)	(0.412)
salesgr	0.207	0.210	0.0494	0.0555
	(0.617)	(0.615)	(0.415)	(0.418)
epsgr	-0.0101	-0.0101	-0.00282	-0.00267
	(0.0111)	(0.0110)	(0.00825)	(0.00818)
total_emissions_int		2.20e-10		1.73e-10
		(2.73e-10)		(2.10e-10)
Constant	-15.89*	-14.98*	-27.84**	-27.85**
	(8.238)	(8.422)	(10.61)	(10.67)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3347	3347	3347	3347
R2-Adj	0.153	0.155	0.434	0.436

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 12: Carbon Beta and Firm Characteristics: energy_consumption_int emissions

	(1) carbon_beta	(2) carbon_beta	(3) carbon_beta	(4) carbon_beta
logsize	-0.928*	-0.514	-0.537	0.516
	(0.512)	(0.346)	(0.880)	(0.370)
bm	-0.722	-0.378	-1.091	-0.250
	(0.828)	(0.611)	(0.989)	(0.480)
leverage	-1.114	-0.935	-2.391	-1.071
	(1.835)	(1.879)	(2.396)	(1.590)
mom	0.435	1.291	-2.760	-0.665
	(4.783)	(4.030)	(2.652)	(2.298)
investa	9.049	7.507	9.631**	5.725
	(5.859)	(5.345)	(4.297)	(3.639)
roe	0.138*	0.104**	0.110	0.0278
	(0.0721)	(0.0492)	(0.0758)	(0.0331)
logppe	1.102**	0.733**	0.603	-0.235
	(0.433)	(0.309)	(0.714)	(0.320)
beta	0.599**	0.761**	0.501	0.471*
	(0.270)	(0.294)	(0.305)	(0.245)
volat	0.378	0.291	-0.0720	-0.153
	(0.273)	(0.253)	(0.229)	(0.232)
salesgr	-0.608*	-0.526**	-0.586*	-0.381***
	(0.318)	(0.207)	(0.319)	(0.119)
epsgr	0.00476	0.00404	0.00351	0.00299
	(0.00674)	(0.00522)	(0.00611)	(0.00355)
energy_consumption_int		0.0000737		0.000166***
		(0.0000548)		(0.0000558)
Constant	-3.275	-5.484	-0.417	-7.725*
	(5.051)	(4.374)	(6.732)	(4.427)
Year/Month FE	yes	yes	yes	yes
Industry FE	no	no	yes	yes
Observations	3181	3181	3181	3181
R2-Adj	0.165	0.221	0.489	0.599

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$