

CompaniesIndex	YearIndex	Ra	Roa	StockPriceClose	TobinsQ
25	9	1	-0.013390049	0.0254	67.45
3.20	57	19	3	0.077751823	0.1110
241.70	NA	124	42	1	0.051598183
0.0018	16.34	0.11	136	46	1
-0.005764788	0.0380	30.27	0.54	157	53
1	0.098233907	0.2242	317.98	5.00	159
53	3	-0.036323634	0.1747	280.20	2.52
PriceToEarningRatio	PriceToEpsRatio	GreenScore	CarbonProductivity	25	127.26415
NA	0.84	0.87	57	6.33054	NA
0.74	0.13	124	38.90476	45.81	0.27
0.20	136	19.78431	NA	0.50	0.60
157	25.70574	30.91	0.76	0.83	159
16.55050	16.89	0.79	0.14	WaterProductivity	WasteProductivity
EnergyProductivity	25	0.99	0.92	0.83	57
0.13	0.00	0.14	124	0.05	0.04
0.12	136	0.00	0.72	0.68	157
0.85	0.97	0.69	159	0.11	0.14
0.13	SustainabilityPayLink	SustainableThemedCommitment	AuditScore	25	1
1	1	1	57	1	1
1	1	1	124	1	1
1	1	1	136	0	1
1	157	1	0	1	159
0	1	1	TotalAssets	Leverage	NetMargin
Industry	Beta	CostEquity	25	1.004000e+10	0.22
0.1891	7	1.1739308	0.0139523830	57	1.241570e+10
0.52	-0.1248	5	0.8491683	-0.0005095010	124
2.209974e+12	1.26	0.0339	4	2.8378998	0.0335872177
136	1.756000e+10	0.45	-0.0243	1	2.1150422
0.0250574980	157	1.013012e+10	0.10	0.2502	5
0.8266926	0.0098549731	159	1.431700e+10	0.05	0.3449
5	-0.1889260	0.0001133556	Eps	FirmSize	LogTobinsQ
LogPriceToEarningRatio	LogEps	25	0.53	23.02984	1.1631508
4.846265	-0.6348783	57	38.18	23.24223	NA
1.845385	3.6423118	124	0.42	28.42400	-2.2072749
3.661117	-0.8675006	136	1.53	23.58889	-0.6161861
2.984889	0.4252677	157	12.37	23.03878	1.6094379
3.246714	2.5152742	159	16.93	23.38471	0.9242589
2.806416	2.8290872	LogStockPrice	LogPriceToEpsRatio	25	4.211387
NA	57	5.487697	NA	124	2.793616
3.824502	136	3.410157	NA	157	5.761988
3.431080	159	5.635504	2.826722	CompaniesIndex	YearIndex
Ra	Roa	StockPriceClose	TobinsQ	10	4
1	-0.07460609	0.1801	92.26	2.54	11
4	2	-0.11679032	0.2045	120.04	2.17
12	4	3	0.04684083	0.1493	104.60
2.00	22	8	1	0.03634923	0.0383
19.16	1.70	64	22	1	0.03034858
0.0237	59.35	0.26	89	30	2
0.01654414	0.0099	478.14	5.02	PriceToEarningRatio	PriceToEpsRatio
GreenScore	CarbonProductivity	10	14.30388	16.71	0.57
0.96	11	13.01952	12.47	0.75	0.13
12	12.58724	13.45	0.74	0.15	22
33.03448	31.84	0.39	0.43	64	9.46571
10.55	0.49	0.21	89	382.51200	846.79
0.12	0.00	WaterProductivity	WasteProductivity	EnergyProductivity	10
0.96	0.94	0.92	11	0.11	0.14
0.11	12	0.12	0.11	0.10	22
0.40	0.02	0.20	64	0.31	0.72
0.19	89	0.00	0.00	SustainabilityPayLink	SustainableThemedCommitment
AuditScore	10	0	0	0	11
1	0	1	1	12	1
0	1	22	0	1	1
64	0	1	1	89	0
0	0	TotalAssets	Leverage	NetMargin	Industry
Beta	CostEquity	Eps	10	196088000000	0.00
0.2667	7	1.67431042	0.019856863	6.45	11
207000000000	0.14	0.2167	7	-0.05332218	-0.001498353
9.22	12	231839000000	0.26	0.2161	7
1.99369967	-0.001196220	8.31	22	1250886000	0.67
0.0733	6	1.72904166	0.020502692	0.58	64
126947000000	0.29	0.0692	4	0.55713590	0.006674204
6.27	89	40159000000	0.53	0.0037	1
1.67636389	0.047105825	1.25	FirmSize	LogTobinsQ	LogPriceToEarningRatio
LogEps	LogStockPrice	10	26.00183	0.9321641	2.660531
1.8640801	4.524611	11	26.05598	0.7747272	2.566450
2.2213750	4.787825	12	26.16931	0.6931472	2.532684
2.1174596	4.650144	22	20.94712	0.5306283	3.497552
-0.5447272	2.952825	64	25.56704	-1.3470736	2.247676
1.8357764	4.083452	89	24.41611	1.6134299	5.946760
0.2231436	6.169904	LogPriceToEpsRatio	10	2.816007	11
2.523326	12	2.598979	22	3.460723	64
2.356126	89	6.741453	CompaniesIndex	YearIndex	Ra
Roa	StockPriceClose	TobinsQ	22	8	1
0.0363492305	0.0383	19.16	1.70	55	19
1	-0.0500084854	-0.0433	220.03	NA	70
24	1	0.0355356130	0.0850	20.90	1.88
89	30	2	0.0165441376	0.0099	478.14
5.02	90	30	3	-0.0009330757	0.0319
699.52	4.36	100	34	1	0.0084040181
0.0557	116.73	1.88	PriceToEarningRatio	PriceToEpsRatio	GreenScore
CarbonProductivity	22	33.03448	31.84	0.39	0.43
55	29.65364	44.54	0.85	0.85	70
24.02299	NA	0.67	0.65	89	382.51200
846.79	0.12	0.00	90	142.75918	179.00
0.18	0.06	100	25.32104	29.05	0.54
0.17	WaterProductivity	WasteProductivity	EnergyProductivity	22	0.40
0.02	0.20	55	0.61	0.82	0.72
70	0.72	0.32	0.61	89	0.00
0.00	90	0.00	0.00	100	0.23
0.92	0.07	SustainabilityPayLink	SustainableThemedCommitment	AuditScore	22
0	1	1	55	1	1
1	1	1	70	1	1
0	89	0	0	0	90
0	0	0	100	1	1
1	TotalAssets	Leverage	NetMargin	Industry	Beta
CostEquity	Eps	22	1250886000	0.67	0.0733
6	1.7290417	0.020502692	0.58	55	9179300000
1.63	0.0165	5	0.4082704	0.004917590	-7.42
70	12100000000	0.27	0.0125	7	1.9956538
0.023648715	0.87	89	40159000000	0.53	0.0037
1	1.6763639	0.047105825	1.25	90	54505000000
1.16	-0.0027	1	1.9839115	-0.001190347	4.90
100	17393100000	0.71	0.1214	8	1.1797257
0.014020763	4.61	FirmSize	LogTobinsQ	LogPriceToEarningRatio	LogEps
LogStockPrice	22	20.94712	0.5306283	3.497552	-0.5447272
2.952825	55	22.94022	NA	3.389585	NaN
5.393764	70	23.21647	0.6312718	3.179011	-0.1392621
3.039749	89	24.41611	1.6134299	5.946760	0.2231436
6.169904	90	24.72156	1.4724721	4.961159	1.5892352
6.550394	100	23.57934	0.6312718	3.231636	1.5282279
4.759864	LogPriceToEpsRatio	22	3.460723	55	3.796388
70	NA	89	6.741453	90	5.187386
100	3.369018	CompaniesIndex	YearIndex	Ra	Roa
StockPriceClose	TobinsQ	6	2	3	0.0053688553
0.0537	38.18	NA	55	19	1
-0.0500084854	-0.0433	220.03	NA	60	20
3	0.0357812443	-0.0017	57.30	NA	89
30	2	0.0165441376	0.0099	478.14	5.02
90	30	3	-0.0009330757	0.0319	699.52
4.36	124	42	1	0.0515981830	0.0018
16.34	0.11	PriceToEarningRatio	PriceToEpsRatio	GreenScore	CarbonProductivity
6	7.93763	4.67	0.39	0.05	55
29.65364	44.54	0.85	0.85	60	73.46154
141.00	0.40	0.09	89		

382.51200 846.79 0.12 0.00 90 142.75918 179.00 0.18 0.06 124 38.90476 45.81 0.27 0.20 WaterProductivity
WasteProductivity EnergyProductivity 6 0.03 0.06 0.00 55 0.61 0.82 0.72 60 0.00 0.00 0.00 89 0.00 0.00 0.00
90 0.00 0.00 0.00 124 0.05 0.04 0.12 SustainabilityPayLink SustainableThemedCommitment AuditScore 6 1 1
0 55 1 1 1 60 1 1 0 89 0 0 0 90 0 0 0 124 1 1 1 TotalAssets Leverage NetMargin Industry Beta CostEquity
Eps 6 4.377100e+10 8.01 0.0676 6 0.5773076 -0.0003463846 4.81 55 9.179300e+09 1.63 0.0165 5 0.4082704
0.0049175902 -7.42 60 5.155810e+11 0.29 0.1169 4 1.2031493 -0.0007218896 -0.78 89 4.015900e+10 0.53
0.0037 1 1.6763639 0.0471058254 1.25 90 5.450500e+10 1.16 -0.0027 1 1.9839115 -0.0011903469 4.90 124
2.209974e+12 1.26 0.0339 4 2.8378998 0.0335872177 0.42 FirmSize LogTobinsQ LogPriceToEarningRatio
LogEps LogStockPrice 6 24.50224 NA 2.071615 1.5706971 3.642312 55 22.94022 NA 3.389585 NaN 5.393764 60
26.96856 NA 4.296762 NaN 4.048301 89 24.41611 1.613430 5.946760 0.2231436 6.169904 90 24.72156 1.472472
4.961159 1.5892352 6.550394 124 28.42400 -2.207275 3.661117 -0.8675006 2.793616 LogPriceToEpsRatio 6
1.541159 55 3.796388 60 4.948760 89 6.741453 90 5.187386 124 3.824502 CompaniesIndex YearIndex Ra
Roa StockPriceClose TobinsQ 10 4 1 -0.07460609 0.1801 92.26 2.54 157 53 1 0.09823391 0.2242 317.98
5.00 173 58 2 0.09390794 -0.0552 117.05 4.54 208 70 1 -0.09448551 0.0436 100.71 0.85 246 82 3 0.04478498
0.0374 229.50 0.96 257 86 2 -0.45719344 -0.0235 NA 1.06 PriceToEarningRatio PriceToEpsRatio GreenScore
CarbonProductivity 10 14.30388 16.71 0.57 0.96 157 25.70574 30.91 0.76 0.83 173 109.39252 NA 0.22
0.00 208 25.82308 15.79 0.36 0.35 246 14.39774 NA 0.18 0.02 257 NA NA 0.01 0.00 WaterProductivity
WasteProductivity EnergyProductivity 10 0.96 0.94 0.92 157 0.85 0.97 0.69 173 0.00 0.00 0.00 208 0.44 0.70
0.37 246 0.00 0.00 0.00 257 0.00 0.00 0.00 SustainabilityPayLink SustainableThemedCommitment AuditScore
10 0 0 0 157 1 0 1 173 0 0 1 208 0 1 0 246 0 0 0 257 0 0 0 TotalAssets Leverage NetMargin Industry Beta
CostEquity Eps 10 196088000000 0.00 0.2667 7 1.6743104 0.0198568629 6.45 157 10130118000 0.10 0.2502 5
0.8266926 0.0098549731 12.37 173 2249000000 0.49 -0.3215 5 1.5598667 0.0438322542 -1.07 208 89356000000
1.58 0.0862 6 1.8136800 0.0215014239 3.90 246 24390000000 143.99 -0.0201 1 0.3709959 -0.0002225975 15.94
257 11941000000 1.19 0.2212 3 0.8866396 0.0249145738 -0.96 FirmSize LogTobinsQ LogPriceToEarningRatio
LogEps LogStockPrice 10 26.00183 0.93216408 2.660531 1.864080 4.524611 157 23.03878 1.60943791 3.246714
2.515274 5.761988 173 21.53375 1.51292701 4.694943 NaN 4.762601 208 25.21589 -0.16251893 3.251269
1.360977 4.612245 246 23.91744 -0.04082199 2.667071 2.768832 5.435903 257 23.20324 0.05826891 NA NaN
NA LogPriceToEpsRatio 10 2.816007 157 3.431080 173 NA 208 2.759377 246 NA 257 NA CompaniesIndex
YearIndex Ra Roa StockPriceClose TobinsQ 25 9 1 -0.01339005 0.0254 67.45 3.20 41 14 2 -0.04084170 0.0172
56.12 2.40 60 20 3 0.03578124 -0.0017 57.30 NA 68 23 2 0.06671125 0.0167 177.65 3.40 88 30 1 -0.08723693
-0.0051 332.55 2.74 89 30 2 0.01654414 0.0099 478.14 5.02 PriceToEarningRatio PriceToEpsRatio GreenScore
CarbonProductivity 25 127.26415 NA 0.84 0.87 41 160.34286 NA 0.66 0.14 60 73.46154 141.00 0.40 0.09
68 265.14925 139.89 0.17 0.00 88 639.51923 NA 0.01 0.00 89 382.51200 846.79 0.12 0.00 WaterProductivity
WasteProductivity EnergyProductivity 25 0.99 0.92 0.83 41 0.00 0.03 0.10 60 0.00 0.00 0.00 68 0.00 0.00 0.00
88 0.00 0.00 0.00 89 0.00 0.00 0.00 SustainabilityPayLink SustainableThemedCommitment AuditScore 25 1 1
1 41 1 1 1 60 1 1 0 68 0 0 0 88 0 0 0 89 0 0 0 TotalAssets Leverage NetMargin Industry Beta CostEquity Eps
25 10040000000 0.22 0.1891 7 1.173931 0.0139523830 0.53 41 4322000000 0.36 0.1070 7 1.539117 0.0432491780
0.35 60 515581000000 0.29 0.1169 4 1.203149 -0.0007218896 -0.78 68 3317696000 0.07 0.1630 5 2.376153
0.0667699008 0.67 88 32555000000 0.47 -0.0006 1 1.169301 0.0138977534 -0.52 89 40159000000 0.53 0.0037
1 1.676364 0.0471058254 1.25 FirmSize LogTobinsQ LogPriceToEarningRatio LogEps LogStockPrice 25
23.02984 1.1631508 4.846265 -0.6348783 4.211387 41 22.18698 0.8754687 5.077314 -1.0498221 4.027492 60
26.96856 NA 4.296762 NaN 4.048301 68 21.92254 1.2237754 5.580293 -0.4004776 5.179815 88 24.20620
1.0079579 6.460717 NaN 5.806790 89 24.41611 1.6134299 5.946760 0.2231436 6.169904 LogPriceToEpsRatio
25 NA 41 NA 60 4.948760 68 4.940856 88 NA 89 6.741453

Table 1: Lagrange Multipliers test for random effects versus OLS

	DependentVariables	TimeEffect	IndividualEffect	TwowaysEffect
1	TobinsQ	0.56	< .01 ***	< .01 ***
2	LogEps	0.7768	< .01 ***	< .01 ***
3	LogStockPrice	0.2061	< .01 ***	< .01 ***
4	LogPriceToEpsRatio	0.5594	< .01 ***	< .01 ***
5	Ra	< .01 ***	0.159	< .01 ***
6	PriceToEarningRatio	0.9644	< .01 ***	< .01 ***

Table 2: F test for fixed effects versus OLS

	DependentVariables	TimeEffect	IndividualEffect	TwowaysEffect
1	TobinsQ	0.3632	< .01 ***	< .01 ***
2	LogEps	0.1823	< .01 ***	< .01 ***
3	LogStockPrice	< .01 ***	< .01 ***	< .01 ***
4	LogPriceToEpsRatio	0.4206	< .01 ***	< .01 ***
5	Ra	< .01 ***	0.8663	< .01 ***
6	PriceToEarningRatio	0.1372	< .01 ***	< .01 ***

Table 3: Hausman Test with time effect in fixed model

	DependentVariables	pvalue
1	TobinsQ	< .05 **
2	LogEps	< .01 ***
3	LogStockPrice	< .01 ***
4	LogPriceToEpsRatio	0.9942
5	Ra	0.269
6	PriceToEarningRatio	0.9977

CompaniesIndex YearIndex Ra Roa StockPriceClose TobinsQ 25 9 1 -0.01339005 0.0254 67.45 3.20 41 14 2
-0.04084170 0.0172 56.12 2.40 57 19 3 0.07775182 0.1110 241.70 NA 60 20 3 0.03578124 -0.0017 57.30 NA 68 23
2 0.06671125 0.0167 177.65 3.40 88 30 1 -0.08723693 -0.0051 332.55 2.74 PriceToEarningRatio PriceToEpsRatio
GreenScore CarbonProductivity 25 127.26415 NA 0.84 0.87 41 160.34286 NA 0.66 0.14 57 6.33054 NA 0.74
0.13 60 73.46154 141.00 0.40 0.09 68 265.14925 139.89 0.17 0.00 88 639.51923 NA 0.01 0.00 WaterProductivity
WasteProductivity EnergyProductivity 25 0.99 0.92 0.83 41 0.00 0.03 0.10 57 0.13 0.00 0.14 60 0.00 0.00 0.00
68 0.00 0.00 0.00 88 0.00 0.00 0.00 SustainabilityPayLink SustainableThemedCommitment AuditScore 25 1 1 1
41 1 1 1 57 1 1 1 60 1 1 0 68 0 0 0 88 0 0 0 TotalAssets Leverage NetMargin Industry Beta CostEquity Eps 25
10040000000 0.22 0.1891 7 1.1739308 0.0139523830 0.53 41 4322000000 0.36 0.1070 7 1.5391167 0.0432491780
0.35 57 12415700000 0.52 -0.1248 5 0.8491683 -0.0005095010 38.18 60 515581000000 0.29 0.1169 4 1.2031493
-0.0007218896 -0.78 68 3317696000 0.07 0.1630 5 2.3761531 0.0667699008 0.67 88 32555000000 0.47 -0.0006
1 1.1693011 0.0138977534 -0.52 FirmSize LogTobinsQ LogPriceToEarningRatio LogEps LogStockPrice 25
23.02984 1.1631508 4.846265 -0.6348783 4.211387 41 22.18698 0.8754687 5.077314 -1.0498221 4.027492 57
23.24223 NA 1.845385 3.6423118 5.487697 60 26.96856 NA 4.296762 NaN 4.048301 68 21.92254 1.2237754
5.580293 -0.4004776 5.179815 88 24.20620 1.0079579 6.460717 NaN 5.806790 LogPriceToEpsRatio 25 NA 41
NA 57 NA 60 4.948760 68 4.940856 88 NA CompaniesIndex YearIndex Ra Roa StockPriceClose TobinsQ 10 4
1 -0.0746060911 0.1801 92.26 2.54 11 4 2 -0.1167903210 0.2045 120.04 2.17 12 4 3 0.0468408304 0.1493 104.60
2.00 89 30 2 0.0165441376 0.0099 478.14 5.02 90 30 3 -0.0009330757 0.0319 699.52 4.36 178 60 1 0.0130717905
0.0393 NA 0.75 PriceToEarningRatio PriceToEpsRatio GreenScore CarbonProductivity 10 14.30388 16.71
0.57 0.96 11 13.01952 12.47 0.75 0.13 12 12.58724 13.45 0.74 0.15 89 382.51200 846.79 0.12 0.00 90 142.75918
179.00 0.18 0.06 178 NA 16.96 0.02 0.00 WaterProductivity WasteProductivity EnergyProductivity 10
0.96 0.94 0.92 11 0.11 0.14 0.11 12 0.12 0.11 0.10 89 0.00 0.00 0.00 90 0.00 0.00 0.00 178 0.00 0.00 0.00
SustainabilityPayLink SustainableThemedCommitment AuditScore 10 0 0 0 11 1 0 1 12 1 0 1 89 0 0 0 90
0 0 0 178 0 0 0 TotalAssets Leverage NetMargin Industry Beta CostEquity 10 1.96088e+11 0.00 0.2667 7
1.67431042 0.019856863 11 2.07000e+11 0.14 0.2167 7 -0.05332218 -0.001498353 12 2.31839e+11 0.26 0.2161 7
1.99369967 -0.001196220 89 4.01590e+10 0.53 0.0037 1 1.67636389 0.047105825 90 5.45050e+10 1.16 -0.0027 1
1.98391153 -0.001190347 178 4.27452e+11 0.33 0.0912 4 0.40949541 0.004932046 Eps FirmSize LogTobinsQ
LogPriceToEarningRatio LogEps 10 6.45 26.00183 0.9321641 2.660531 1.8640801 11 9.22 26.05598 0.7747272
2.566450 2.2213750 12 8.31 26.16931 0.6931472 2.532684 2.1174596 89 1.25 24.41611 1.6134299 5.946760
0.2231436 90 4.90 24.72156 1.4724721 4.961159 1.5892352 178 12092.00 26.78111 -0.2876821 NA 9.4002994
LogStockPrice LogPriceToEpsRatio 10 4.524611 2.816007 11 4.787825 2.523326 12 4.650144 2.598979 89
6.169904 6.741453 90 6.550394 5.187386 178 NA 2.830858 CompaniesIndex YearIndex Ra Roa StockPriceClose
TobinsQ 22 8 1 0.0363492305 0.0383 19.16 1.70 23 8 2 -0.0944602010 0.0445 22.25 1.71 24 8 3 -0.0250285637
0.0666 19.21 1.45 37 13 1 0.0006293493 0.0302 265.41 0.93 55 19 1 -0.0500084854 -0.0433 220.03 NA 56 19

Table 4: Hausman Test with individual effect in fixed model

	DependentVariables	pvalue
1	TobinsQ	< .01 ***
2	LogEps	< .01 ***
3	LogStockPrice	0.873
4	LogPriceToEpsRatio	0.9288
5	Ra	0.5576
6	PriceToEarningRatio	0.3748

Table 5: Hausman Test with twoways effects in fixed model

	DependentVariables	pvalue
1	TobinsQ	< .01 ***
2	LogEps	< .05 **
3	LogStockPrice	< .1 *
4	LogPriceToEpsRatio	0.9341
5	Ra	0.3276
6	PriceToEarningRatio	0.2062

2 -0.0044381245 0.0391 297.20 NA PriceToEarningRatio PriceToEpsRatio GreenScore CarbonProductivity
22 33.03448 31.84 0.39 0.43 23 30.90278 31.04 0.52 0.03 24 17.62385 21.05 0.57 0.04 37 33.72427 29.78
0.00 0.00 55 29.65364 44.54 0.85 0.85 56 29.69031 NA 0.84 0.13 WaterProductivity WasteProductivity
EnergyProductivity 22 0.40 0.02 0.20 23 0.07 0.03 0.01 24 0.09 0.01 0.05 37 0.00 0.00 0.00 55 0.61 0.82
0.72 56 0.12 0.13 0.12 SustainabilityPayLink SustainableThemedCommitment AuditScore 22 0 1 1 23 1 1
1 24 1 1 1 37 0 0 0 55 1 1 1 56 1 1 1 TotalAssets Leverage NetMargin Industry Beta CostEquity Eps 22
1250886000 0.67 0.0733 6 1.7290417 0.020502692 0.58 23 1682000000 1.30 0.0738 6 0.8466823 0.023791773
0.72 24 1851000000 1.38 0.0665 6 0.7432216 -0.000445933 1.09 37 12000139000 8.91 0.1160 7 0.9131758
0.010875474 7.87 55 9179300000 1.63 0.0165 5 0.4082704 0.004917590 -7.42 56 10574300000 0.89 -0.0865
5 0.4730059 0.013291466 10.01 FirmSize LogTobinsQ LogPriceToEarningRatio LogEps LogStockPrice 22
20.94712 0.53062825 3.497552 -0.5447272 2.952825 23 21.24325 0.53649337 3.430846 -0.3285041 3.102342
24 21.33899 0.37156356 2.869253 0.0861777 2.955431 37 23.20818 -0.07257069 3.518218 2.0630581 5.581276
55 22.94022 NA 3.389585 NaN 5.393764 56 23.08169 NA 3.390821 2.3035846 5.694405 LogPriceToEpsRatio
22 3.460723 23 3.435277 24 3.046901 37 3.393837 55 3.796388 56 NA CompaniesIndex YearIndex Ra Roa
StockPriceClose TobinsQ 10 4 1 -0.0746060911 0.1801 92.26 2.54 11 4 2 -0.1167903210 0.2045 120.04 2.17
12 4 3 0.0468408304 0.1493 104.60 2.00 89 30 2 0.0165441376 0.0099 478.14 5.02 90 30 3 -0.0009330757
0.0319 699.52 4.36 178 60 1 0.0130717905 0.0393 NA 0.75 PriceToEarningRatio PriceToEpsRatio GreenScore
CarbonProductivity 10 14.30388 16.71 0.57 0.96 11 13.01952 12.47 0.75 0.13 12 12.58724 13.45 0.74 0.15
89 382.51200 846.79 0.12 0.00 90 142.75918 179.00 0.18 0.06 178 NA 16.96 0.02 0.00 WaterProductivity
WasteProductivity EnergyProductivity 10 0.96 0.94 0.92 11 0.11 0.14 0.11 12 0.12 0.11 0.10 89 0.00 0.00
0.00 90 0.00 0.00 0.00 178 0.00 0.00 0.00 SustainabilityPayLink SustainableThemedCommitment AuditScore
10 0 0 0 11 1 0 1 12 1 0 1 89 0 0 0 90 0 0 0 178 0 0 0 TotalAssets Leverage NetMargin Industry Beta
CostEquity 10 1.96088e+11 0.00 0.2667 7 1.67431042 0.019856863 11 2.07000e+11 0.14 0.2167 7 -0.05332218
-0.001498353 12 2.31839e+11 0.26 0.2161 7 1.99369967 -0.001196220 89 4.01590e+10 0.53 0.0037 1 1.67636389
0.047105825 90 5.45050e+10 1.16 -0.0027 1 1.98391153 -0.001190347 178 4.27452e+11 0.33 0.0912 4 0.40949541
0.004932046 Eps FirmSize LogTobinsQ LogPriceToEarningRatio LogEps 10 6.45 26.00183 0.9321641 2.660531
1.8640801 11 9.22 26.05598 0.7747272 2.566450 2.2213750 12 8.31 26.16931 0.6931472 2.532684 2.1174596 89
1.25 24.41611 1.6134299 5.946760 0.2231436 90 4.90 24.72156 1.4724721 4.961159 1.5892352 178 12092.00
26.78111 -0.2876821 NA 9.4002994 LogStockPrice LogPriceToEpsRatio 10 4.524611 2.816007 11 4.787825
2.523326 12 4.650144 2.598979 89 6.169904 6.741453 90 6.550394 5.187386 178 NA 2.830858

Table 6: Model comparison TobinsQ - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	LogTobinsQ	
	(1)	(2)
SustainabilityPayLink	0.102** (0.044)	0.048 (0.030)
SustainableThemedCommitment	0.062 (0.043)	0.012 (0.041)
AuditScore	0.153*** (0.044)	0.086** (0.039)
CarbonProductivity	0.112 (0.133)	0.075 (0.065)
WaterProductivity	0.194 (0.155)	-0.031 (0.074)
WasteProductivity	0.032 (0.153)	-0.011 (0.074)
FirmSize	-0.427*** (0.015)	-0.398*** (0.022)
NetMargin	0.420*** (0.152)	-0.007 (0.111)
Leverage	0.003 (0.003)	0.001 (0.001)
Industry	-0.022*** (0.007)	-0.018 (0.011)
Constant	10.295*** (0.343)	9.742*** (0.529)
Observations	946	946
R ²	0.488	0.262
Adjusted R ²	0.483	0.254
F Statistic (df = 10; 935)	89.135***	33.113***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 7: Model comparison TobinsQ - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	LogTobinsQ		
	(1)	(2)	(3)
SustainabilityPayLink	0.093** (0.044)	0.028 (0.031)	0.033 (0.031)
SustainableThemedCommitment	0.057 (0.044)	-0.063 (0.049)	-0.060 (0.049)
AuditScore	0.147*** (0.045)	0.010 (0.045)	0.010 (0.045)
CarbonProductivity	0.171 (0.146)	0.056 (0.065)	0.037 (0.071)
WaterProductivity	0.216 (0.157)	-0.049 (0.072)	-0.049 (0.073)
WasteProductivity	0.050 (0.154)	-0.030 (0.074)	-0.028 (0.073)
FirmSize	-0.426*** (0.015)	-0.218*** (0.066)	-0.253*** (0.074)
NetMargin	0.404*** (0.153)	-0.154 (0.121)	-0.157 (0.120)
Leverage	0.003 (0.003)	0.001 (0.002)	0.0005 (0.001)
Industry	-0.022*** (0.007)		
Observations	946	946	946
R ²	0.489	0.029	0.032
Adjusted R ²	0.482	-0.521	-0.522
F Statistic	89.258*** (df = 10; 933)	2.013** (df = 9; 603)	2.226** (df = 9; 601)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 8: Model comparison LogEps - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	LogEps	
	(1)	(2)
SustainabilityPayLink	0.012 (0.055)	0.035 (0.051)
SustainableThemedCommitment	0.065 (0.054)	0.059 (0.062)
AuditScore	-0.086 (0.055)	-0.115* (0.062)
CarbonProductivity	0.280* (0.170)	0.026 (0.123)
WaterProductivity	-0.273 (0.190)	-0.008 (0.137)
WasteProductivity	0.303 (0.186)	0.056 (0.134)
FirmSize	0.093*** (0.018)	0.095*** (0.026)
NetMargin	0.153 (0.220)	-0.090 (0.212)
Leverage	0.007* (0.004)	0.0003 (0.003)
Industry	-0.010 (0.008)	-0.010 (0.013)
Constant	-1.127*** (0.413)	-1.114* (0.603)
Observations	967	967
R ²	0.047	0.023
Adjusted R ²	0.037	0.013
F Statistic (df = 10; 956)	4.733***	2.157**
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 9: Model comparison LogEps - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	LogEps		
	(1)	(2)	(3)
SustainabilityPayLink	−0.005 (0.056)	0.030 (0.060)	0.030 (0.062)
SustainableThemedCommitment	0.056 (0.054)	0.044 (0.096)	0.042 (0.097)
AuditScore	−0.095* (0.055)	−0.172* (0.095)	−0.182* (0.095)
CarbonProductivity	0.397** (0.185)	−0.055 (0.132)	−0.054 (0.144)
WaterProductivity	−0.240 (0.191)	0.064 (0.143)	0.070 (0.143)
WasteProductivity	0.339* (0.187)	−0.005 (0.141)	0.008 (0.141)
FirmSize	0.094*** (0.018)	0.178 (0.138)	0.090 (0.156)
NetMargin	0.124 (0.221)	−0.354 (0.255)	−0.371 (0.256)
Leverage	0.007* (0.004)	−0.001 (0.003)	−0.001 (0.003)
Industry	−0.010 (0.008)		
Observations	967	967	967
R ²	0.050	0.013	0.012
Adjusted R ²	0.038	−0.584	−0.590
F Statistic	4.992*** (df = 10; 954)	0.883 (df = 9; 602)	0.835 (df = 9; 600)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 10: Model comparison LogStockPrice - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	LogStockPrice	
	(1)	(2)
SustainabilityPayLink	−0.040 (0.045)	−0.004 (0.024)
SustainableThemedCommitment	−0.053 (0.045)	−0.010 (0.035)
AuditScore	−0.040 (0.045)	0.0002 (0.032)
CarbonProductivity	0.133 (0.146)	−0.143*** (0.053)
WaterProductivity	0.171 (0.167)	0.106* (0.058)
WasteProductivity	−0.126 (0.169)	−0.078 (0.060)
FirmSize	−0.065*** (0.015)	−0.043** (0.022)
NetMargin	0.132 (0.132)	0.061 (0.079)
Leverage	0.008*** (0.003)	−0.001 (0.001)
Industry	−0.006 (0.007)	−0.013 (0.012)
Constant	5.763*** (0.349)	5.267*** (0.514)
Observations	984	984
R ²	0.050	0.179
Adjusted R ²	0.040	0.171
F Statistic (df = 10; 973)	5.124***	20.973***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 11: Model comparison LogStockPrice - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	LogStockPrice		
	(1)	(2)	(3)
SustainabilityPayLink	−0.066 (0.046)	−0.003 (0.024)	−0.016 (0.024)
SustainableThemedCommitment	−0.065 (0.045)	0.025 (0.039)	0.012 (0.039)
AuditScore	−0.057 (0.045)	0.019 (0.035)	0.006 (0.036)
CarbonProductivity	0.331** (0.158)	−0.128** (0.052)	−0.064 (0.056)
WaterProductivity	0.226 (0.167)	0.106* (0.057)	0.122** (0.057)
WasteProductivity	−0.089 (0.169)	−0.068 (0.059)	−0.062 (0.059)
FirmSize	−0.063*** (0.015)	0.117** (0.049)	0.079 (0.055)
NetMargin	0.115 (0.131)	0.028 (0.081)	0.031 (0.081)
Leverage	0.008*** (0.003)	−0.002 (0.001)	−0.002 (0.001)
Industry	−0.006 (0.007)		
Observations	984	984	984
R ²	0.059	0.038	0.015
Adjusted R ²	0.048	−0.507	−0.546
F Statistic	6.119*** (df = 10; 971)	2.721*** (df = 9; 628)	1.093 (df = 9; 626)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 12: Model comparison LogPriceToEpsRatio - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	LogPriceToEpsRatio	
	(1)	(2)
SustainabilityPayLink	−0.108*** (0.039)	−0.083** (0.042)
SustainableThemedCommitment	−0.102*** (0.039)	−0.109** (0.047)
AuditScore	0.071* (0.040)	0.056 (0.046)
CarbonProductivity	−0.217* (0.113)	−0.179* (0.104)
WaterProductivity	0.091 (0.137)	0.095 (0.125)
WasteProductivity	−0.096 (0.130)	−0.143 (0.119)
FirmSize	−0.134*** (0.012)	−0.138*** (0.016)
NetMargin	0.389** (0.173)	0.403** (0.197)
Leverage	0.003 (0.005)	0.003 (0.004)
Industry	0.002 (0.006)	0.001 (0.008)
Constant	6.291*** (0.286)	6.383*** (0.377)
Observations	787	787
R ²	0.222	0.261
Adjusted R ²	0.212	0.251
F Statistic (df = 10; 776)	22.132***	27.347***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 13: Model comparison LogPriceToEpsRatio - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	LogPriceToEpsRatio		
	(1)	(2)	(3)
SustainabilityPayLink	−0.113*** (0.040)	−0.026 (0.059)	−0.032 (0.060)
SustainableThemedCommitment	−0.105*** (0.040)	−0.107 (0.093)	−0.110 (0.094)
AuditScore	0.068* (0.040)	0.043 (0.087)	0.031 (0.088)
CarbonProductivity	−0.190 (0.124)	−0.075 (0.127)	−0.056 (0.139)
WaterProductivity	0.098 (0.137)	0.103 (0.146)	0.107 (0.146)
WasteProductivity	−0.081 (0.132)	−0.182 (0.136)	−0.162 (0.137)
FirmSize	−0.134*** (0.012)	−0.123 (0.140)	−0.217 (0.158)
NetMargin	0.379** (0.174)	0.542 (0.339)	0.514 (0.340)
Leverage	0.003 (0.005)	0.003 (0.005)	0.003 (0.005)
Industry	0.002 (0.006)		
Observations	787	787	787
R ²	0.222	0.018	0.019
Adjusted R ²	0.210	−0.608	−0.613
F Statistic	22.133*** (df = 10; 774)	0.963 (df = 9; 480)	1.017 (df = 9; 478)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 14: Model comparison Ra - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	Ra	
	(1)	(2)
SustainabilityPayLink	−0.0004 (0.004)	−0.0004 (0.004)
SustainableThemedCommitment	0.001 (0.004)	0.001 (0.004)
AuditScore	0.0003 (0.004)	0.0003 (0.004)
CarbonProductivity	0.009 (0.012)	0.009 (0.012)
WaterProductivity	−0.001 (0.014)	−0.001 (0.014)
WasteProductivity	−0.00002 (0.014)	−0.00002 (0.014)
FirmSize	0.003** (0.001)	0.003** (0.001)
NetMargin	0.008 (0.013)	0.008 (0.013)
Leverage	0.0003 (0.0004)	0.0003 (0.0004)
Industry	0.001** (0.001)	0.001** (0.001)
Constant	−0.081*** (0.029)	−0.081*** (0.029)
Observations	1,039	1,039
R ²	0.015	0.015
Adjusted R ²	0.005	0.005
F Statistic (df = 10; 1028)	1.567	1.567
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 15: Model comparison Ra - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	Ra		
	(1)	(2)	(3)
SustainabilityPayLink	0.002 (0.004)	-0.007 (0.008)	-0.001 (0.008)
SustainableThemedCommitment	0.003 (0.004)	0.004 (0.013)	0.009 (0.012)
AuditScore	0.001 (0.004)	-0.008 (0.012)	-0.005 (0.011)
CarbonProductivity	-0.011 (0.012)	0.012 (0.017)	-0.019 (0.017)
WaterProductivity	-0.004 (0.013)	-0.010 (0.019)	-0.012 (0.018)
WasteProductivity	-0.003 (0.013)	0.010 (0.019)	0.007 (0.018)
FirmSize	0.003** (0.001)	0.036** (0.015)	0.028* (0.016)
NetMargin	0.009 (0.012)	0.008 (0.026)	0.008 (0.024)
Leverage	0.0003 (0.0003)	0.001 (0.002)	0.0001 (0.002)
Industry	0.001** (0.001)		
Observations	1,039	1,039	1,039
R ²	0.019	0.013	0.009
Adjusted R ²	0.007	-0.536	-0.547
F Statistic	1.937** (df = 10; 1026)	0.964 (df = 9; 667)	0.666 (df = 9; 665)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 16: Model comparison PriceToEarningRatio - Pool (1), Random (2)

	<i>Dependent variable:</i>	
	LogPriceToEarningRatio	
	(1)	(2)
SustainabilityPayLink	−0.066* (0.038)	−0.060 (0.041)
SustainableThemedCommitment	−0.177*** (0.038)	−0.161*** (0.045)
AuditScore	0.105*** (0.038)	0.115** (0.045)
CarbonProductivity	−0.197* (0.116)	−0.186* (0.109)
WaterProductivity	0.170 (0.133)	0.121 (0.124)
WasteProductivity	−0.097 (0.128)	−0.076 (0.120)
FirmSize	−0.134*** (0.013)	−0.141*** (0.016)
NetMargin	−0.297** (0.131)	−0.253* (0.145)
Leverage	−0.0004 (0.008)	−0.0001 (0.008)
Industry	0.009 (0.006)	0.008 (0.008)
Constant	6.337*** (0.295)	6.500*** (0.381)
Observations	989	989
R ²	0.179	0.180
Adjusted R ²	0.170	0.172
F Statistic (df = 10; 978)	21.264***	21.412***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 17: Model comparison PriceToEarningRatio - Fixed with time (1), individual (2) and twoways effects (3)

	<i>Dependent variable:</i>		
	LogPriceToEarningRatio		
	(1)	(2)	(3)
SustainabilityPayLink	−0.078** (0.039)	−0.020 (0.059)	−0.042 (0.061)
SustainableThemedCommitment	−0.182*** (0.038)	0.0001 (0.095)	−0.016 (0.095)
AuditScore	0.099** (0.039)	0.258*** (0.092)	0.244*** (0.093)
CarbonProductivity	−0.119 (0.126)	−0.094 (0.127)	0.009 (0.139)
WaterProductivity	0.187 (0.133)	0.072 (0.139)	0.088 (0.139)
WasteProductivity	−0.080 (0.129)	−0.026 (0.136)	−0.010 (0.136)
FirmSize	−0.133*** (0.013)	−0.150 (0.122)	−0.178 (0.137)
NetMargin	−0.304** (0.131)	−0.204 (0.228)	−0.193 (0.227)
Leverage	0.001 (0.008)	0.008 (0.013)	0.010 (0.013)
Industry	0.008 (0.006)		
Observations	989	989	989
R ²	0.180	0.018	0.018
Adjusted R ²	0.170	−0.533	−0.538
F Statistic	21.365*** (df = 10; 976)	1.287 (df = 9; 633)	1.266 (df = 9; 631)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 18: Model based on LM, wild and hausmand test

	<i>Dependent variable:</i>	
	LogEps (1)	LogStockPrice (2)
SustainabilityPayLink	−0.005 (0.056)	−0.040 (0.045)
SustainableThemedCommitment	0.056 (0.054)	−0.053 (0.045)
AuditScore	−0.095* (0.055)	−0.040 (0.045)
CarbonProductivity	0.397** (0.185)	0.133 (0.146)
WaterProductivity	−0.240 (0.191)	0.171 (0.167)
WasteProductivity	0.339* (0.187)	−0.126 (0.169)
FirmSize	0.094*** (0.018)	−0.065*** (0.015)
NetMargin	0.124 (0.221)	0.132 (0.132)
Leverage	0.007* (0.004)	0.008*** (0.003)
Industry	−0.010 (0.008)	−0.006 (0.007)
Constant		5.763*** (0.349)
Observations	967	984
R ²	0.050	0.050
Adjusted R ²	0.038	0.040
F Statistic	4.992*** (df = 10; 954)	5.124*** (df = 10; 973)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 19: Model based on LM, wild and hausmand test

	<i>Dependent variable:</i>	
	LogTobinsQ	LogPriceToEpsRatio
	(1)	(2)
SustainabilityPayLink	0.102** (0.044)	−0.113*** (0.040)
SustainableThemedCommitment	0.062 (0.043)	−0.105*** (0.040)
AuditScore	0.153*** (0.044)	0.068* (0.040)
CarbonProductivity	0.112 (0.133)	−0.190 (0.124)
WaterProductivity	0.194 (0.155)	0.098 (0.137)
WasteProductivity	0.032 (0.153)	−0.081 (0.132)
FirmSize	−0.427*** (0.015)	−0.134*** (0.012)
NetMargin	0.420*** (0.152)	0.379** (0.174)
Leverage	0.003 (0.003)	0.003 (0.005)
Industry	−0.022*** (0.007)	0.002 (0.006)
Constant	10.295*** (0.343)	
Observations	946	787
R ²	0.488	0.222
Adjusted R ²	0.483	0.210
F Statistic	89.135*** (df = 10; 935)	22.133*** (df = 10; 774)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Table 20: Lagrange Multipliers test for random effects versus OLS

	DependentVariables	TimeEffect
1	TobinsQ	0.37
2	LogPriceToEarningRatio	0.93
3	LogStockPrice	0.85
4	LogPriceToEpsRatio	0.32

Table 21: F test for fixed effects versus OLS

	DependentVariables	TimeEffect
1	TobinsQ	0.6665
2	LogPriceToEarningRatio	0.2444
3	LogStockPrice	0.2735
4	LogPriceToEpsRatio	< .1 *

Table 22: Hausman Test with time effect in fixed model

	DependentVariables	pvalue
1	TobinsQ	< .01 ***
2	LogPriceToEarningRatio	0.9922
3	LogStockPrice	< .05 **
4	LogPriceToEpsRatio	0.6228

Table 23: Fixed Model

	<i>Dependent variable:</i>	
	LogPriceToEarningRatio	LogPriceToEpsRatio
	(1)	(2)
GreenScore	-0.124 (0.087)	-0.287** (0.112)
FirmSize	-0.146*** (0.012)	-0.144*** (0.015)
NetMargin	-0.090 (0.142)	0.013 (0.191)
Leverage	-0.003 (0.008)	-0.00004 (0.003)
Industry	0.004 (0.006)	-0.008 (0.008)
Observations	992	789
R ²	0.137	0.132
Adjusted R ²	0.131	0.124
F Statistic	31.196*** (df = 5; 984)	23.704*** (df = 5; 781)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 24: Pool Model

	<i>Dependent variable:</i>	
	LogPriceToEarningRatio	LogPriceToEpsRatio
	(1)	(2)
GreenScore	−0.110 (0.086)	−0.250** (0.111)
FirmSize	−0.146*** (0.012)	−0.144*** (0.015)
NetMargin	−0.086 (0.142)	0.029 (0.191)
Leverage	−0.003 (0.008)	−0.0005 (0.003)
Industry	0.004 (0.006)	−0.008 (0.008)
Constant	6.580*** (0.294)	6.657*** (0.354)
Observations	992	789
R ²	0.136	0.129
Adjusted R ²	0.131	0.123
F Statistic	31.004*** (df = 5; 986)	23.124*** (df = 5; 783)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01