

Appendix A : Outliers

First I measure the cook's distance of my models. Observations that have a cook's distance greater than 4 times the mean are considered as influential and are summarized in figures 1, 2 and 3.

Companies	Year	FinancialIndicator	Ticker	ROA	TobinsQ	ROE
8 8 2016 ACIW	0.07	1.45	0.18	429	32	2015 APA -0.72 0.93 -1.62 786 389 2015 WYN 0.06 1.40 0.60 787
390 2015 XEC	-0.36	1.97	-0.66	955	161	2014 GILD 0.39 4.08 0.83 1168 374 2014 VRTX -0.33 11.92 -0.64
GreenScore	EnergyProductivity	CarbonProductivity	WaterProductivity	8	0.57	0.05 0.04 0.09 429 0.31 0.09
0.04 0.01 786	0.53	0.06	0.08	0.04	787	0.01 0.00 0.00 0.00 955 0.36 0.88 0.83 0.00 1168 0.18 0.00 0.00 0.00
WasteProductivity	Green.Revenue	SustainabilityPayLink	8	0.01	0.18	1 429 0.00 0.01 1 786 0.02 0.12 1 787
0.00 0.01 0 955	0.00	0.53	0	1168	0.00	0.91 0 SustainableThemedCommitment AuditScore FirmSize Leverage
NetMargin	8	1	1	9.28	0.87	7.85 429 0 1 10.28 3.54 -3.63 786 1 1 9.99 5.22 8.62 787 0 0 9.72 0.53 -1.66
955 0 0 10.54	0.77	0.49	1168	0 0	9.37	0.74 -1.27 Industry 8 6 429 3 786 1 787 3 955 5 1168 5 Companies
YearFinancialIndicator	Ticker	ROA	TobinsQ	ROE	GreenScore	8 8 2016 ACIW 0.07 1.45 0.18 0.57 156 156
2016 FNMA	0.00	1.03	-0.93	0.10	173	173 2016 HES -0.19 0.85 -0.33 0.47 190 190 2016 INTU 0.22 7.46 0.98
0.48 230 230 2016 MA	0.24	5.93	0.70	0.26	374	374 2016 VRTX -0.04 8.06 -0.11 0.18 EnergyProductivity
CarbonProductivity	WaterProductivity	8	0.05	0.04	0.09	156 0.00 0.00 0.00 173 0.08 0.06 0.08 190 0.08 0.10 0.03
230 0.00 0.11 0.00	374	0.00	0.01	0.00	WasteProductivity	Green.Revenue SustainabilityPayLink 8 0.01 0.18 1
156 0.00 0.10 0 173	0.04	0.01	1	190	0.10	0.17 0 230 0.00 0.10 0 374 0.00 0.17 0 SustainableThemedCommitment
AuditScore	FirmSize	Leverage	NetMargin	8	1	1 9.28 0.87 7.85 156 0 0 12.52 537.36 0.49 173 1 1 10.46 0.46
-3.52 190 0 0 9.59	0.51	0.21	230	1	0	10.27 0.92 0.38 374 0 0 9.46 0.45 0.07 Industry 8 6 156 4 173 3 190
7 230 7 374 5 Companies	YearFinancialIndicator	Ticker	ROA	TobinsQ	ROE	GreenScore 8 8 2016 ACIW
0.07 1.45 0.18 0.57	156	156	2016 FNMA	0.00	1.03	-0.93 0.10 173 173 2016 HES -0.19 0.85 -0.33 0.47 190
190 2016 INTU	0.22	7.46	0.98	0.48	230	230 2016 MA 0.24 5.93 0.70 0.26 374 374 2016 VRTX -0.04 8.06
-0.11 0.18 EnergyProductivity	CarbonProductivity	WaterProductivity	8	0.05	0.04	0.09 156 0.00 0.00 0.00 173
0.08 0.06 0.08 190	0.08	0.10	0.03	230	0.00	0.11 0.00 374 0.00 0.01 0.00 WasteProductivity Green.Revenue
SustainabilityPayLink	8	0.01	0.18	1	156	0.00 0.10 0 173 0.04 0.01 1 190 0.10 0.17 0 230 0.00 0.10 0 374 0.00
0.17 0 SustainableThemedCommitment	AuditScore	FirmSize	Leverage	NetMargin	8	1 1 9.28 0.87 7.85 156 0 0
12.52 537.36 0.49	173	1	1	10.46	0.46	-3.52 190 0 0 9.59 0.51 0.21 230 1 0 10.27 0.92 0.38 374 0 0 9.46 0.45 0.07
Industry 8 6 156	4	173	3	190	7	230 7 374 5 at least one couple (id-time) has NA in at least one index dimension

in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany") at least one couple (id-time) has NA in at least one index dimension in resulting pdata.frame to find out which, use e.g. table(index(your_pdataframe), useNA = "ifany")

Table 1: Model 1 - Comparaison with and without outliers

	<i>Dependent variable:</i>		
	ROA		
	(1)	(2)	(3)
SustainabilityPayLink	−0.008* (0.005)	−0.005 (0.004)	−0.004 (0.004)
SustainableThemedCommitment	0.010* (0.006)	0.010* (0.005)	0.009* (0.005)
AuditScore	−0.002 (0.006)	−0.002 (0.005)	−0.003 (0.005)
CarbonProductivity	0.012 (0.012)	0.0002 (0.010)	0.001 (0.011)
WaterProductivity	0.020 (0.013)	0.015 (0.010)	0.027** (0.012)
WasteProductivity	−0.014 (0.013)		−0.013 (0.012)
Leverage	0.00001 (0.00005)	0.00002 (0.00004)	−0.001*** (0.0002)
NetMargin	0.041*** (0.004)	0.084*** (0.006)	0.089*** (0.007)
FirmSize	−0.028*** (0.005)	−0.033*** (0.004)	−0.034*** (0.004)
Constant	0.343*** (0.051)	0.388*** (0.046)	0.406*** (0.046)
Observations	1,191	1,185	1,150
R ²	0.131	0.186	0.189
Adjusted R ²	0.124	0.181	0.183
F Statistic	19.745*** (df = 9; 1181)	33.642*** (df = 8; 1176)	29.586*** (df = 9; 1140)

Note:

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

Table 2: Model 2 - Comparaison with and without outliers

	<i>Dependent variable:</i>	
	TobinsQ	
	(1)	(2)
SustainabilityPayLink	0.013 (0.058)	0.005 (0.045)
SustainableThemedCommitment	0.015 (0.081)	0.062 (0.062)
AuditScore	0.041 (0.080)	0.088 (0.059)
CarbonProductivity	0.049 (0.129)	−0.003 (0.101)
WaterProductivity	−0.090 (0.142)	−0.062 (0.115)
WasteProductivity	−0.001 (0.140)	−0.027 (0.113)
Leverage	0.0004 (0.001)	−0.003 (0.002)
NetMargin	−0.013 (0.037)	0.141** (0.070)
FirmSize	−1.738*** (0.107)	−1.354*** (0.077)
Constant	19.815*** (1.108)	15.653*** (0.798)
Observations	1,051	1,010
R ²	0.212	0.263
Adjusted R ²	0.205	0.257
F Statistic	31.055*** (df = 9; 1041)	39.600*** (df = 9; 1000)

Note:

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

Table 3: Model 3 - Comparaison with and without outliers

	<i>Dependent variable:</i>	
	ROE	
	(1)	(2)
SustainabilityPayLink	0.049 (0.077)	0.050 (0.078)
SustainableThemedCommitment	0.099 (0.080)	0.069 (0.082)
AuditScore	0.053 (0.081)	0.043 (0.081)
CarbonProductivity	0.020 (0.212)	-0.037 (0.219)
WaterProductivity	0.072 (0.240)	0.074 (0.222)
WasteProductivity	-0.086 (0.235)	
Leverage	0.002*** (0.001)	-0.010** (0.005)
NetMargin	0.061 (0.064)	0.045 (0.084)
FirmSize	-0.065 (0.064)	-0.028 (0.065)
Constant	0.780 (0.651)	0.441 (0.662)
Observations	1,191	1,152
R ²	0.012	0.007
Adjusted R ²	0.004	0.0001
F Statistic	1.541 (df = 9; 1181)	1.019 (df = 8; 1143)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Figure 1: Observations considered as outliers in model 1 (i.e. Roa)

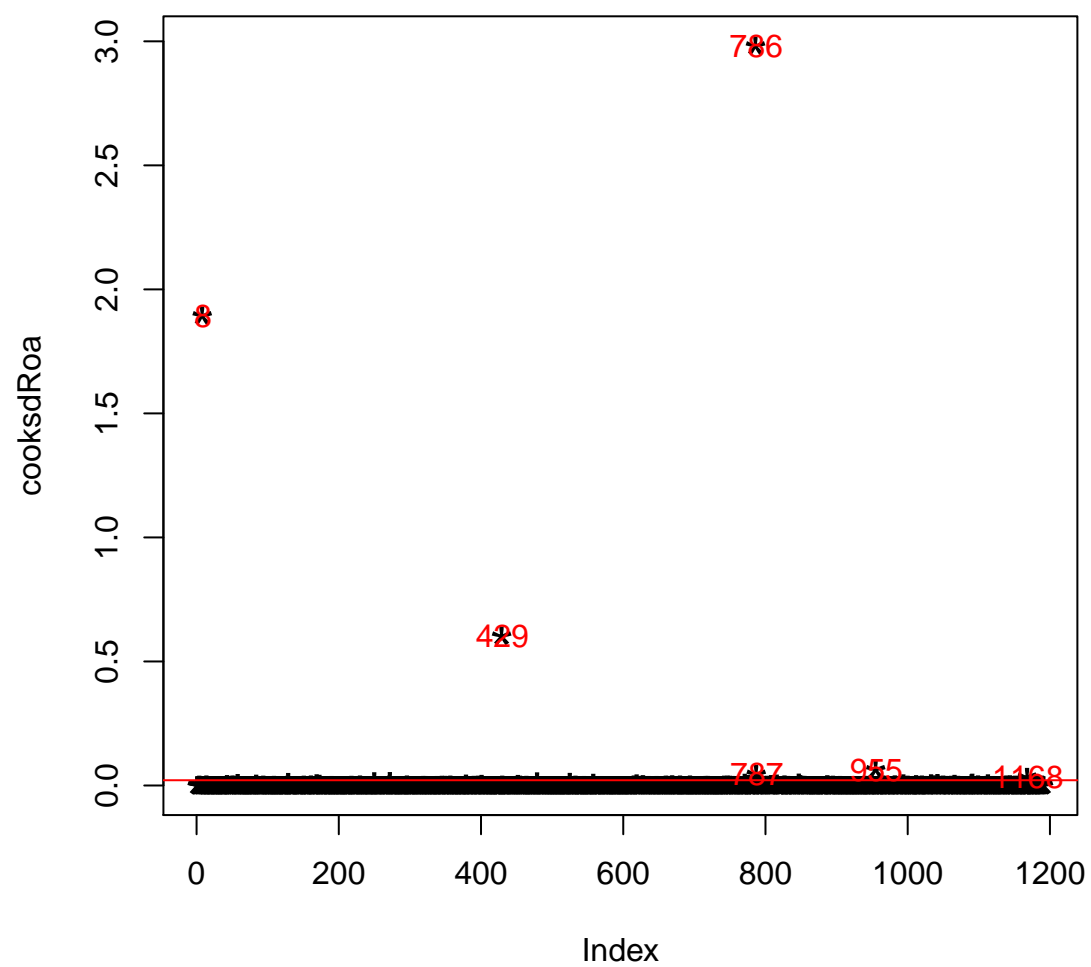


Figure 2: Observations considered as outliers in model 2 (i.e. Tobin's Q)

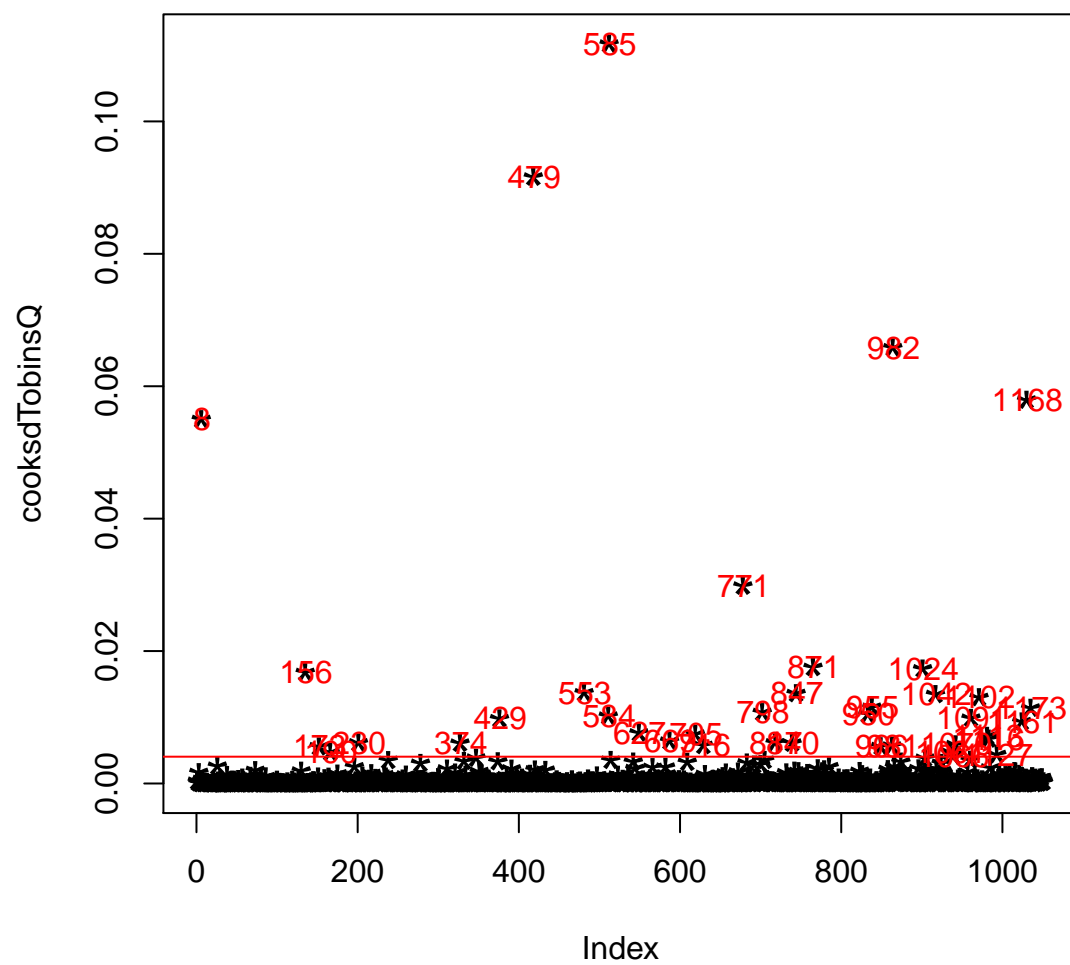


Figure 3: Observations considered as outliers in model 1 (i.e. Roe)

