

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 YearFinancialIndicator ROA TobinsQ ROE YearNewsWeekGR
96 32 2015 -0.72 0.93 -1.62 2016 1167 389 2015 0.06 1.40 0.60 2016 GreenScore EnergyProductivity CarbonPro-
ductivity WaterProductivity 96 0.20 0.00 0.04 0.00 1167 0.58 0.08 0.09 0.05 WasteProductivity Green.Revenue
SustainabilityPayLink 96 0.00 0.01 1 1167 0.04 0.12 1 SustainableThemedCommitment AuditScore FirmSize
Leverage NetMargin 96 0 1 10.28 3.54 -3.63 1167 1 1 9.99 5.22 8.62 Industry 96 3 1167 1 Companies
YearFinancialIndicator ROA TobinsQ ROE YearNewsWeekGR 10 4 2013 0.06 2.18 0.44 2014 68 23 2014 0.08
8.25 0.14 2015 96 32 2015 -0.72 0.93 -1.62 2016 157 53 2013 0.17 5.06 0.23 2014 229 77 2013 0.12 5.07 0.26 2014
246 82 2015 -0.01 1.42 -5.42 2016 GreenScore EnergyProductivity CarbonProductivity WaterProductivity
10 0.57 0.92 0.96 0.96 68 0.17 0.00 0.00 0.00 96 0.20 0.00 0.04 0.00 157 0.76 0.69 0.83 0.85 229 0.57 0.74
0.76 0.75 246 0.18 0.00 0.02 0.00 WasteProductivity Green.Revenue SustainabilityPayLink 10 0.94 0.01 0 68
0.00 0.17 0 96 0.00 0.01 1 157 0.97 0.53 1 229 0.00 0.91 0 246 0.00 0.16 0 SustainableThemedCommitment
AuditScore FirmSize Leverage NetMargin 10 0 0 11.35 6.06 0.09 68 0 0 9.62 0.25 0.12 96 0 1 10.28 3.54
-3.63 157 0 1 10.07 0.13 0.27 229 0 1 10.13 0.75 0.22 246 0 0 10.59 -776.59 -0.03 Industry 10 7 68 5 96 3 157
5 229 5 246 1 Companies YearFinancialIndicator ROA TobinsQ ROE YearNewsWeekGR 10 4 2013 0.06
2.18 0.44 2014 68 23 2014 0.08 8.25 0.14 2015 96 32 2015 -0.72 0.93 -1.62 2016 157 53 2013 0.17 5.06 0.23
2014 229 77 2013 0.12 5.07 0.26 2014 246 82 2015 -0.01 1.42 -5.42 2016 GreenScore EnergyProductivity
CarbonProductivity WaterProductivity 10 0.57 0.92 0.96 0.96 68 0.17 0.00 0.00 0.00 96 0.20 0.00 0.04 0.00
157 0.76 0.69 0.83 0.85 229 0.57 0.74 0.76 0.75 246 0.18 0.00 0.02 0.00 WasteProductivity Green.Revenue
SustainabilityPayLink 10 0.94 0.01 0 68 0.00 0.17 0 96 0.00 0.01 1 157 0.97 0.53 1 229 0.00 0.91 0 246 0.00
0.16 0 SustainableThemedCommitment AuditScore FirmSize Leverage NetMargin 10 0 0 11.35 6.06 0.09 68 0
0 9.62 0.25 0.12 96 0 1 10.28 3.54 -3.63 157 0 1 10.07 0.13 0.27 229 0 1 10.13 0.75 0.22 246 0 0 10.59 -776.59
-0.03 Industry 10 7 68 5 96 3 157 5 229 5 246 1
```

```
#####
##### Hausman Test #####
#####
```

```
#Model without the 2 outliers from ROA
```

```
Roa2_Fixed <-plm(ROA ~ SustainabilityPayLink + SustainableThemedCommitment + AuditScore + CarbonProductivity
```

```
#Model2 without the 40 outliers from Tobin's Q
```

```
Tobins3_Fixed <-plm(TobinsQ ~ SustainabilityPayLink + SustainableThemedCommitment + AuditScore + CarbonProductivity
```

```
#Model3 without the 38 outliers from ROE
```

```
Roe2_Fixed <-plm(ROE ~ SustainabilityPayLink + SustainableThemedCommitment + AuditScore + CarbonProductivity
```

```
HausmannRoa <- cbind("Model 1 without outliers",phtest(Roa2_Fixed,Roa2)$p.value)
```

```
HausmannTobinsQ <- cbind("Model 2 without outliers",phtest(Tobins3_Fixed,Tobins3)$p.value)
```

```
HausmannRoe <- cbind("Model 3 without outliers",phtest(Roe2_Fixed,Roe2)$p.value)
```

```
HausmanTable <- rbind(HausmannRoa, HausmannTobinsQ, HausmannRoe)
```

```
colnames(HausmanTable) <- c("Model","P-Value")
```

```
stargazer(HausmanTable, summary = FALSE, table.placement = "h", type="latex", label = "Hausman", title = "Hausman Test Results")
```

```
##
```

```
## \begin{table}[h] \centering
```

Table 1: Model 1 - Energy

	<i>Dependent variable:</i>	
	ROA	
	(1)	(2)
SustainabilityPayLink	−0.001 (0.004)	−0.002 (0.004)
SustainableThemedCommitment	0.009* (0.005)	0.013*** (0.004)
AuditScore	−0.003 (0.005)	−0.001 (0.004)
CarbonProductivity	−0.022 (0.017)	−0.020 (0.013)
EnergyProductivity	0.011 (0.014)	0.005 (0.011)
WaterProductivity	0.033*** (0.012)	0.028*** (0.009)
WasteProductivity	0.001 (0.012)	0.003 (0.009)
Leverage	−0.00001 (0.00004)	−0.00001 (0.00003)
NetMargin	0.058*** (0.004)	0.160*** (0.008)
FirmSize	−0.028*** (0.004)	−0.034*** (0.004)
Industry	−0.003*** (0.001)	−0.004*** (0.001)
Constant	0.356*** (0.045)	0.410*** (0.040)
Observations	1,191	1,189
R ²	0.173	0.309
Adjusted R ²	0.165	0.302
F Statistic	22.414*** (df = 11; 1179)	47.801*** (df = 11; 1177)

Note:

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

Table 2: Model 1 - No Energy

	<i>Dependent variable:</i>	
	ROA	
	(1)	(2)
SustainabilityPayLink	−0.002 (0.004)	−0.002 (0.004)
SustainableThemedCommitment	0.010* (0.005)	0.013*** (0.004)
AuditScore	−0.003 (0.005)	−0.001 (0.004)
CarbonProductivity	−0.012 (0.011)	−0.016* (0.008)
WaterProductivity	0.034*** (0.012)	0.028*** (0.009)
WasteProductivity	0.0002 (0.012)	0.003 (0.009)
Leverage	−0.00001 (0.00004)	−0.00001 (0.00003)
NetMargin	0.059*** (0.004)	0.160*** (0.008)
FirmSize	−0.028*** (0.004)	−0.034*** (0.004)
Industry	−0.003*** (0.001)	−0.004*** (0.001)
Constant	0.357*** (0.045)	0.411*** (0.040)
Observations	1,191	1,189
R ²	0.173	0.309
Adjusted R ²	0.166	0.303
F Statistic	24.619*** (df = 10; 1180)	52.597*** (df = 10; 1178)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Table 3: Model 1 - Short Version

	<i>Dependent variable:</i>
	ROA
SustainabilityPayLink	−0.003 (0.003)
SustainableThemedCommitment	0.013*** (0.004)
AuditScore	−0.001 (0.004)
Leverage	−0.00001 (0.00003)
NetMargin	0.161*** (0.008)
FirmSize	−0.034*** (0.004)
Industry	−0.004*** (0.001)
Constant	0.411*** (0.040)
Observations	1,189
R ²	0.300
Adjusted R ²	0.296
F Statistic	72.473*** (df = 7; 1181)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 4: Model 1 - Short Version

	<i>Dependent variable:</i>
	ROA
CarbonProductivity	−0.014* (0.008)
WaterProductivity	0.029*** (0.009)
WasteProductivity	0.002 (0.009)
Leverage	−0.00001 (0.00003)
NetMargin	0.159*** (0.008)
FirmSize	−0.033*** (0.004)
Industry	−0.003*** (0.001)
Constant	0.398*** (0.039)
Observations	1,189
R ²	0.304
Adjusted R ²	0.300
F Statistic	73.579*** (df = 7; 1181)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 5: Model 2 - Comparaison with and without outliers

	<i>Dependent variable:</i>	
	TobinsQ	
	(1)	(2)
SustainabilityPayLink	0.033 (0.066)	0.053 (0.045)
SustainableThemedCommitment	0.031 (0.091)	0.067 (0.063)
AuditScore	−0.039 (0.088)	0.071 (0.059)
CarbonProductivity	0.017 (0.146)	−0.167 (0.102)
WaterProductivity	−0.093 (0.162)	−0.040 (0.111)
WasteProductivity	−0.219 (0.158)	−0.133 (0.110)
Leverage	0.0001 (0.001)	−0.004 (0.003)
NetMargin	−0.003 (0.058)	0.125 (0.113)
FirmSize	−0.898*** (0.092)	−1.400*** (0.081)
Industry	−0.017 (0.028)	−0.050*** (0.018)
Constant	11.177*** (0.959)	16.337*** (0.836)
Observations	1,059	1,021
R ²	0.095	0.274
Adjusted R ²	0.087	0.267
F Statistic	11.027*** (df = 10; 1048)	38.055*** (df = 10; 1010)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Table 6: Model 3 - Comparaison with and without outliers

	<i>Dependent variable:</i>	
	ROE	
	(1)	(2)
SustainabilityPayLink	0.095 (0.069)	0.098 (0.069)
SustainableThemedCommitment	0.130* (0.073)	0.115 (0.075)
AuditScore	0.019 (0.073)	0.015 (0.073)
CarbonProductivity	−0.099 (0.183)	−0.089 (0.186)
WaterProductivity	−0.044 (0.207)	0.047 (0.185)
WasteProductivity	0.149 (0.203)	
Leverage	0.002*** (0.001)	−0.016*** (0.005)
NetMargin	0.124* (0.074)	0.390** (0.165)
FirmSize	−0.106* (0.057)	−0.083 (0.060)
Industry	−0.015 (0.012)	−0.020* (0.012)
Constant	1.251** (0.579)	1.047* (0.614)
Observations	1,191	1,153
R ²	0.022	0.023
Adjusted R ²	0.014	0.015
F Statistic	2.694*** (df = 10; 1180)	2.972*** (df = 9; 1143)

Note:

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

```

## \caption{Hausman Test PValue}
## \label{Hausman}
## \begin{tabular}{@{\extracolsep{5pt}} cc}
## \hline
## \hline \hline
## Model & P-Value \hline
## \hline \hline
## Model 1 without outliers & 0.0783188996559174 \hline
## Model 2 without outliers & 0.044576173935356 \hline
## Model 3 without outliers & 0.0109631738775666 \hline
## \hline \hline
## \end{tabular}
## \end{table}

```

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

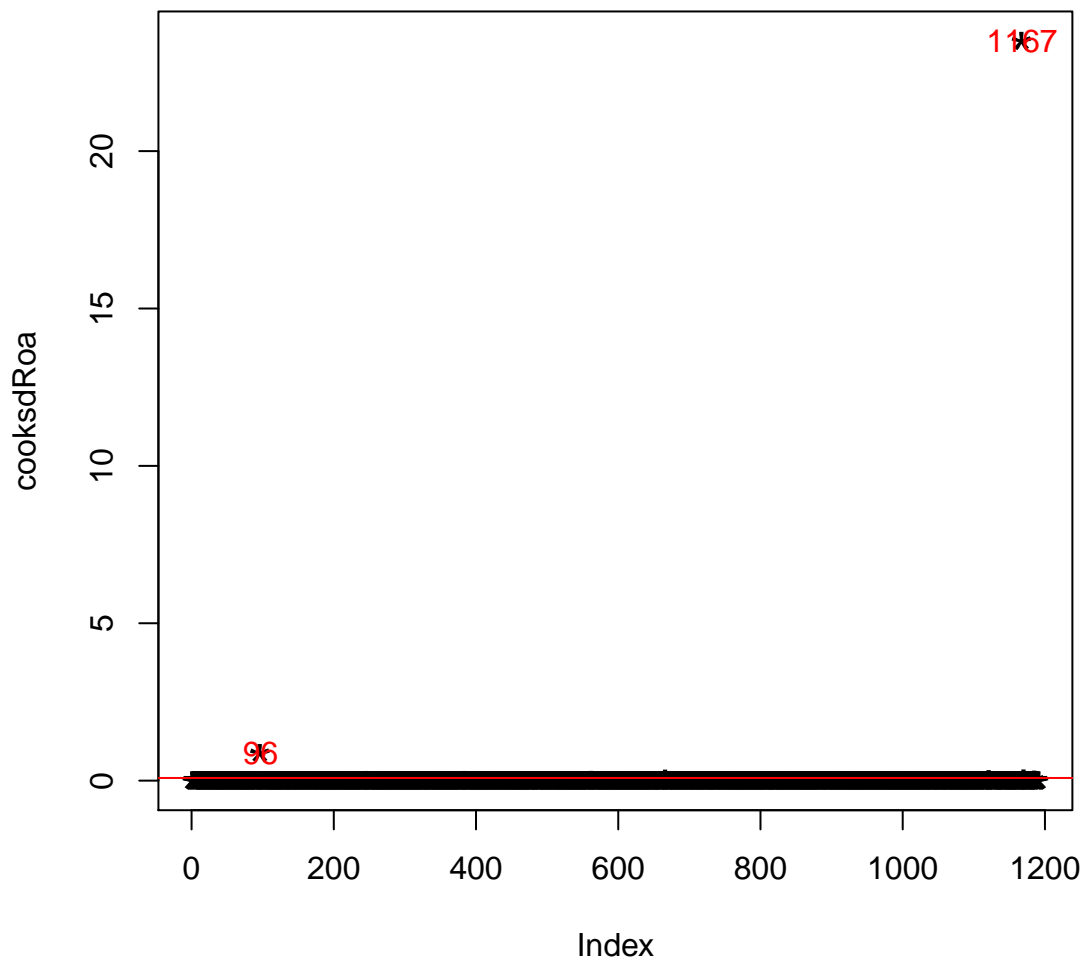


Figure 2: Observations considered as outliers in model 2 (i.e. Tobin's Q)

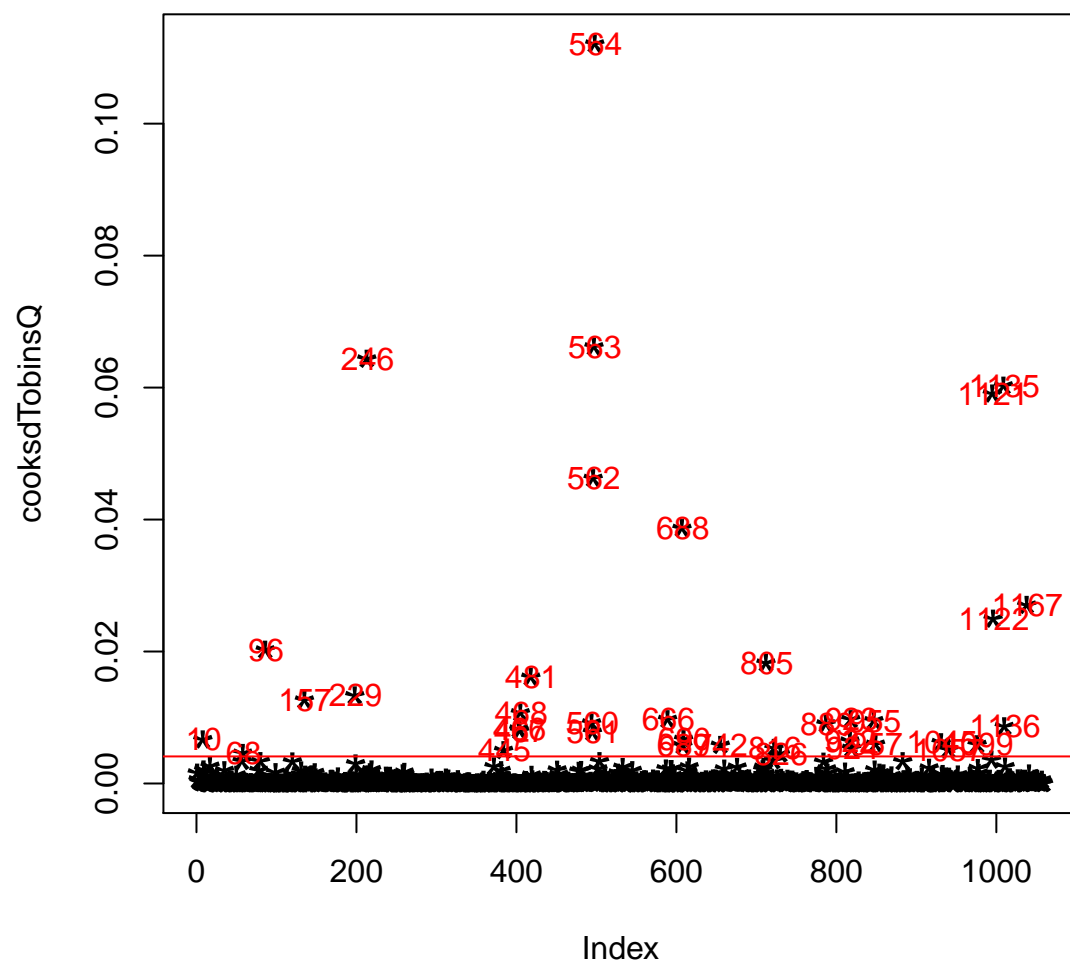


Figure 3: Observations considered as outliers in model 1 (i.e. Roe)

