

Model Test

Kinif Pierrick

5 avril 2018

Conclusion Roa one lag avec outliers + TobinsQ sans outliers sans lag + Roe one lag without outliers

Model Within with outliers

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: Within Model without lag

	<i>Dependent variable:</i>		
	ROA	TobinsQ	ROE
	(1)	(2)	(3)
SustainabilityPayLink	0.038 (0.044)	0.023 (0.747)	-0.449 (0.785)
SustainableThemedCommitment	-0.258* (0.137)	3.053 (2.290)	1.327 (2.463)
AuditScore	0.016 (0.131)	1.909 (2.216)	-0.200 (2.359)
EnergyProductivity	0.004 (0.012)	-0.127 (0.208)	0.051 (0.219)
CarbonProductivity	-0.012 (0.015)	-0.454* (0.249)	-0.154 (0.262)
WaterProductivity	0.008 (0.010)	-0.055 (0.178)	-0.085 (0.186)
WasteProductivity	-0.007 (0.010)	-0.208 (0.174)	-0.128 (0.184)
Leverage	-0.00005 (0.0001)	-0.0004 (0.001)	-0.001 (0.001)
NetMargin	0.070*** (0.006)	-0.709*** (0.223)	0.160 (0.102)
FirmSize	-0.003 (0.008)	0.460*** (0.148)	0.122 (0.136)
Observations	1,191	1,063	1,191
R ²	0.175	0.105	0.014
Adjusted R ²	-0.252	-0.370	-0.496
F Statistic	16.649*** (df = 10; 784)	8.141*** (df = 10; 694)	1.133 (df = 10; 784)

Note:

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

Table 2: Within Model with one lag

	<i>Dependent variable:</i>		
	ROA	TobinsQ	ROE
	(1)	(2)	(3)
SustainabilityPayLink	−0.048 (0.053)	0.535 (0.682)	1.140 (1.005)
SustainableThemedCommitment	0.384** (0.166)	2.885 (2.086)	2.800 (3.149)
AuditScore	0.022 (0.159)	0.084 (1.992)	−1.141 (3.018)
EnergyProductivity	0.018 (0.015)	0.093 (0.191)	−0.358 (0.281)
CarbonProductivity	−0.039** (0.018)	−0.049 (0.229)	0.185 (0.337)
WaterProductivity	0.037*** (0.013)	−0.094 (0.162)	−0.163 (0.238)
WasteProductivity	0.003 (0.012)	−0.183 (0.159)	0.319 (0.236)
Leverage	−0.00002 (0.00005)	0.0001 (0.001)	0.003*** (0.001)
NetMargin	0.052*** (0.005)	−0.007 (0.058)	0.127 (0.088)
FirmSize	−0.0002 (0.010)	−0.323*** (0.124)	−0.049 (0.185)
Observations	1,191	1,059	1,191
R ²	0.161	0.024	0.033
Adjusted R ²	−0.274	−0.495	−0.468
F Statistic	15.006*** (df = 10; 784)	1.668* (df = 10; 691)	2.638*** (df = 10; 784)

Note:

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

Table 3: Within Model with two lag

	<i>Dependent variable:</i>		
	ROA (1)	TobinsQ (2)	ROE (3)
SustainabilityPayLink	−0.146** (0.061)	−0.029 (0.601)	0.668 (1.196)
SustainableThemedCommitment	0.197 (0.192)	0.435 (1.838)	0.976 (3.747)
AuditScore	−0.221 (0.184)	0.196 (1.787)	−1.844 (3.589)
EnergyProductivity	0.011 (0.017)	0.082 (0.168)	0.047 (0.334)
CarbonProductivity	−0.012 (0.021)	−0.086 (0.202)	−0.109 (0.400)
WaterProductivity	0.023 (0.015)	−0.101 (0.143)	−0.125 (0.283)
WasteProductivity	−0.019 (0.014)	0.012 (0.141)	0.180 (0.281)
Leverage	0.00001 (0.0001)	0.0002 (0.001)	0.005*** (0.001)
NetMargin	0.036*** (0.004)	−0.006 (0.037)	0.031 (0.074)
FirmSize	0.010 (0.019)	−2.290*** (0.193)	0.825** (0.374)
Industry10	0.016 (0.054)		−1.425 (1.049)
Observations	1,191	1,051	1,191
R ²	0.120	0.173	0.032
Adjusted R ²	−0.337	−0.265	−0.471
F Statistic	9.705*** (df = 11; 783)	14.400*** (df = 10; 686)	2.364*** (df = 11; 783)

Note:

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

Table 4: Within Model without outliers

	<i>Dependent variable:</i>		
	ROA	TobinsQ	ROE
	(1)	(2)	(3)
SustainabilityPayLink	0.050 (0.031)	0.003 (0.541)	0.155 (0.284)
SustainableThemedCommitment	−0.183* (0.097)	4.072** (1.662)	−0.213 (0.889)
AuditScore	0.056 (0.094)	1.434 (1.607)	0.170 (0.849)
EnergyProductivity	0.008 (0.009)	−0.108 (0.151)	0.036 (0.079)
CarbonProductivity	−0.008 (0.010)	−0.449** (0.181)	−0.017 (0.095)
WaterProductivity	0.001 (0.007)	−0.081 (0.129)	−0.066 (0.068)
WasteProductivity	−0.010 (0.007)	−0.197 (0.126)	−0.070 (0.067)
Leverage	−0.00004 (0.00004)	−0.0003 (0.001)	−0.002*** (0.0004)
NetMargin	0.195*** (0.010)	0.362** (0.179)	0.275*** (0.037)
FirmSize	−0.016*** (0.006)	0.094 (0.133)	0.035 (0.049)
Observations	1,183	1,053	1,181
R ²	0.364	0.156	0.112
Adjusted R ²	0.032	−0.298	−0.353
F Statistic	44.455*** (df = 10; 776)	12.663*** (df = 10; 684)	9.727*** (df = 10; 775)
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01

Table 5: Within Model with one lag without outliers

	<i>Dependent variable:</i>		
	ROA	TobinsQ	ROE
	(1)	(2)	(3)
SustainabilityPayLink	−0.006 (0.036)	0.368 (0.554)	−0.284 (0.315)
SustainableThemedCommitment	0.366*** (0.113)	3.126* (1.693)	3.572*** (0.985)
AuditScore	0.022 (0.108)	0.250 (1.618)	−0.116 (0.944)
EnergyProductivity	0.001 (0.010)	0.002 (0.155)	0.093 (0.088)
CarbonProductivity	−0.010 (0.012)	−0.090 (0.186)	−0.244** (0.106)
WaterProductivity	0.021** (0.009)	−0.028 (0.132)	0.126* (0.075)
WasteProductivity	0.004 (0.008)	−0.160 (0.129)	0.040 (0.074)
Leverage	−0.00003 (0.00003)	−0.0001 (0.0005)	0.0004 (0.001)
NetMargin	0.148*** (0.009)	0.028 (0.047)	0.093*** (0.028)
FirmSize	−0.031*** (0.007)	−0.839*** (0.123)	0.048 (0.058)
Observations	1,182	1,050	1,185
R ²	0.276	0.082	0.043
Adjusted R ²	−0.103	−0.409	−0.457
F Statistic	29.580*** (df = 10; 775)	6.129*** (df = 10; 683)	3.479*** (df = 10; 778)

Note:

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

Table 6: Within Model with two lag without outliers

	<i>Dependent variable:</i>		
	ROA (1)	TobinsQ (2)	ROE (3)
SustainabilityPayLink	−0.087* (0.050)	−0.093 (0.527)	−0.348 (0.396)
SustainableThemedCommitment	0.127 (0.156)	1.153 (1.644)	−0.158 (1.261)
AuditScore	−0.236 (0.150)	0.209 (1.566)	−1.281 (1.183)
EnergyProductivity	0.005 (0.014)	0.063 (0.147)	0.173 (0.110)
CarbonProductivity	−0.011 (0.017)	−0.017 (0.177)	−0.301** (0.132)
WaterProductivity	0.018 (0.012)	−0.111 (0.126)	0.036 (0.094)
WasteProductivity	−0.014 (0.012)	0.002 (0.123)	−0.018 (0.093)
Leverage	0.00002 (0.00005)	0.0001 (0.0005)	0.0004 (0.001)
NetMargin	0.077*** (0.006)	0.011 (0.032)	0.051** (0.025)
FirmSize	−0.016 (0.016)	−1.870*** (0.173)	0.172 (0.127)
Industry10	0.011 (0.044)		−1.388*** (0.346)
Observations	1,181	1,043	1,185
R ²	0.184	0.151	0.039
Adjusted R ²	−0.246	−0.301	−0.465
F Statistic	15.850*** (df = 11; 773)	12.107*** (df = 10; 680)	2.832*** (df = 11; 777)

Note:

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