

Model Test

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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")`

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Table 1: Within Model without lag

| | <i>Dependent variable:</i> | | |
|-----------------------------|----------------------------|-------------------------|----------------------|
| | ROA (1) | TobinsQ (2) | ROE (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) |
| GreenScore | −0.010 (0.019) | 0.479* (0.255) | 0.234 (0.367) |
| Green.Revenue | 0.009 (0.007) | −0.085 (0.085) | 0.127 (0.123) |
| SustainabilityPayLink | −0.026 (0.060) | −0.135 (0.763) | 0.976 (1.128) |
| SustainableThemedCommitment | 0.412** (0.170) | 2.022 (2.130) | 2.611 (3.211) |
| AuditScore | 0.069 (0.168) | −1.279 (2.110) | −1.391 (3.181) |
| EnergyProductivity | 0.014 (0.015) | 0.068 (0.195) | −0.448 (0.288) |
| CarbonProductivity | −0.043** (0.018) | 0.021 (0.233) | 0.156 (0.341) |
| WaterProductivity | 0.038*** (0.013) | −0.132 (0.163) | −0.173 (0.240) |
| WasteProductivity | 0.003 (0.012) | −0.165 (0.160) | 0.331 (0.236) |
| Leverage | −0.00002 (0.00005) | 0.0001 (0.001) | 0.003*** (0.001) |
| NetMargin | 0.052*** (0.005) | −0.011 (0.058) | 0.126 (0.088) |
| FirmSize | 0.0003 (0.010) | −0.341*** (0.124) | −0.060 (0.186) |
| Observations | 1,191 | 1,059 | 1,191 |
| R ² | 0.163 | 0.029 | 0.035 |
| Adjusted R ² | −0.274 | −0.491 | −0.469 |
| F Statistic | 12.680*** (df = 12; 782) | 1.709* (df = 12; 689) | 2.361*** (df = 12; 782) |

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) |
| GreenScore | −0.010 (0.013) | 0.442** (0.209) | −0.055 (0.115) |
| Green.Revenue | 0.004 (0.004) | 0.049 (0.070) | 0.007 (0.039) |
| SustainabilityPayLink | 0.011 (0.041) | −0.147 (0.621) | −0.207 (0.354) |
| SustainableThemedCommitment | 0.388*** (0.115) | 2.539 (1.727) | 3.666*** (1.006) |
| AuditScore | 0.056 (0.114) | −0.670 (1.712) | 0.035 (0.997) |
| EnergyProductivity | 0.0002 (0.010) | −0.081 (0.159) | 0.096 (0.091) |
| CarbonProductivity | −0.012 (0.012) | −0.070 (0.189) | −0.250** (0.107) |
| WaterProductivity | 0.022** (0.009) | −0.055 (0.133) | 0.130* (0.075) |
| WasteProductivity | 0.003 (0.009) | −0.142 (0.129) | 0.037 (0.074) |
| Leverage | −0.00003 (0.00003) | −0.00003 (0.0005) | 0.0004 (0.001) |
| NetMargin | 0.148*** (0.009) | 0.026 (0.047) | 0.093*** (0.028) |
| FirmSize | −0.030*** (0.007) | −0.871*** (0.123) | 0.051 (0.058) |
| Observations | 1,182 | 1,050 | 1,185 |
| R ² | 0.277 | 0.091 | 0.043 |
| Adjusted R ² | −0.104 | −0.401 | −0.460 |
| F Statistic | 24.720*** (df = 12; 773) | 5.658*** (df = 12; 681) | 2.912*** (df = 12; 776) |

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