Table 1
Number of observations by country

|  | Observations | Percentage | Cum. |
| :---: | :---: | :---: | :---: |
| Australia | 816 | 6.229 | 6.229 |
| Austria | 41 | 0.313 | 6.542 |
| Belgium | 97 | 0.740 | 7.282 |
| Bermuda | 15 | 0.115 | 7.397 |
| Brazil | 257 | 1.962 | 9.359 |
| Canada | 1,155 | 8.817 | 18.176 |
| Chile | 106 | 0.809 | 18.985 |
| China | 335 | 2.557 | 21.542 |
| Czech Republic | 8 | 0.061 | 21.603 |
| Denmark | 112 | 0.855 | 22.458 |
| Egypt | 22 | 0.168 | 22.626 |
| Finland | 142 | 1.084 | 23.710 |
| France | 575 | 4.389 | 28.099 |
| Germany | 405 | 3.092 | 31.191 |
| Greece | 10 | 0.076 | 31.267 |
| Hong Kong | 126 | 0.962 | 32.229 |
| India | 170 | 1.298 | 33.527 |
| Ireland; | 174 | 1.328 | 34.855 |
| Isle of Man | 1 | 0.008 | 34.863 |
| Israel | 6 | 0.046 | 34.908 |
| Italy | 132 | 1.008 | 35.916 |
| Japan | 1,766 | 13.481 | 49.397 |
| Jersey | 20 | 0.153 | 49.550 |
| Luxembourg | 65 | 0.496 | 50.046 |
| Macau | 5 | 0.038 | 50.084 |
| Mexico | 122 | 0.931 | 51.015 |
| Netherlan | 220 | 1.679 | 52.695 |
| New Zealand | 53 | 0.405 | 53.099 |
| Norway | 70 | 0.534 | 53.634 |
| Papua New | 7 | 0.053 | 53.687 |
| Portugal | 29 | 0.221 | 53.908 |
| Russia | 190 | 1.450 | 55.359 |
| South Africa | 80 | 0.611 | 55.969 |
| Spain | 207 | 1.580 | 57.550 |
| Sweden | 259 | 1.977 | 59.527 |
| Switzerland | 389 | 2.969 | 62.496 |
| Thailand | 97 | 0.740 | 63.237 |
| United Kingdom | 1,204 | 9.191 | 72.427 |
| United States | 3,612 | 27.573 | 100 |
| Total | 13,100 | 100 |  |

Table 2
Number of observations by activity sector

| TRBC economic sector name | Number of <br> observations | Percentage | Cum. |
| :--- | :---: | :---: | :---: |
| Basic Materials | 1,845 | 14.084 | 14.084 |
| Consumer cyclical. | 2,469 | 18.847 | 32.931 |
| Consumer Non-Cyclical | 1,293 | 9.870 | 42.802 |
| Energy | 1,310 | 10.000 | 52.802 |
| Healthcare | 1,016 | 7.756 | 60.557 |
| Industrial | 2,795 | 21.336 | 81.893 |
| Technology | 1,022 | 7.802 | 89.695 |
| Telecommunications Services | 518 | 3.954 | 93.649 |
| Utilities | 832 | 6.351 | 100 |
| Total | 13,100 | 100 |  |

Table 3
Variable description

| Variables | Description |
| :---: | :---: |
| ED_SCORE | The aggregation of the 54 items considered. Each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise. |
| LME | Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy |
| DEVEP | Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a developing country |
| BOARD_STRUCTURE | Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board |
| INDEP_MEMBERS | The ratio between the total number of independent directors on boards and the total number of directors on boards |
| BSIZE | The total number of directors on boards |
| BMEET | The numbers of meetings held by boards each year |
| CEODUALITY | Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0 , otherwise |
| SIZE | The log of total sales |
| ROA | Operate income before interests and taxes over total assets |
| LEV | Debt over total assets |
| CSR_COMMT | Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0 , otherwise |
| BASIC MATERIALS | Dummy variable: $1=$ Basic Materials; $0=$ Otherwise |
| CONSUMER CYCLICALS | Dummy variable: $1=$ Consumer Cyclicals; $0=$ Otherwise |
| CONSUMER NONCYCLICALS | Dummy variable: 1= Consumer Non-Cyclicals; $0=$ Otherwise |
| ENERGY | Dummy variable: $1=$ Energy; $0=$ Otherwise |
| HEALTHCARE | Dummy variable: $1=$ Healthcare; $0=$ Otherwise |
| INDUSTRIALS | Dummy variable: $1=$ Industrial; $0=$ Otherwise |
| TECHNOLOGY | Dummy variable: $1=$ Technology; $0=$ Otherwise |
| TELECOMMUNICATION SERVICES | Dummy variable: $1=$ Telecommunication Services; $0=$ Otherwise |
| UTILITIES | Dummy variable: $1=$ Utilities; $0=$ Otherwise |

Table 4
Descriptive analysis

| Variable | Obs | Mean | Std. Dev. | P25 | p50 | P75 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| ED_SCORE | 13,100 | 12.872 | 9.308 | 4.000 | 12.000 | 21.000 |
| LME | 13,100 | 89.129 | 38.129 | 1.000 | 1.000 | 1.000 |
| DEVEP | 13,100 | 89.205 | 31.032 | 1.000 | 1.000 | 1.000 |
| BOARD_STRUCTURE | 13,100 | 71.845 | 44.977 | 0.000 | 1.000 | 1.000 |
| INDEP_MEMBERS | 13,100 | 63.325 | 26.381 | 46.667 | 70.000 | 85.714 |
| BSIZE | 13,100 | 10.905 | 3.561 | 9.000 | 10.000 | 13.000 |
| BMEET | 13,100 | 9.421 | 5.247 | 6.000 | 8.000 | 11.000 |
| CEODUALITY | 13,100 | 29.926 | 45.795 | 0.000 | 0.000 | 1.000 |
| SIZE | 13,100 | 9.643 | 1.479 | 9.394 | 9.806 | 10.241 |
| ROA | 13,100 | 6.439 | 8.446 | 2.764 | 5.575 | 9.584 |
| LEV | 13,100 | 12.900 | 217.720 | 2.661 | 5.723 | 10.779 |
| CSR_COMMT | 13,100 | 58.905 | 49.202 | 0.000 | 1.000 | 1.000 |
| BASIC MATERIALS | 13,100 | 14.085 | 34.788 | 0.000 | 0.000 | 0.000 |
| CONSUMER | 13,100 | 18.848 | 39.112 | 0.000 | 0.000 | 0.000 |
| CYCLICALS |  |  |  |  |  |  |
| CONSUMER NON- | 13,100 | 9.870 | 29.828 | 0.000 | 0.000 | 0.000 |
| CYCLICALS | 13,100 | 10.000 | 30.000 | 0.000 | 0.000 | 0.000 |
| ENERGY | 13,100 | 7.756 | 26.749 | 0.000 | 0.000 | 0.000 |
| HEALTHCARE | 13,100 | 21.337 | 40.971 | 0.000 | 0.000 | 0.000 |
| INDUSTRIALS | 13,100 | 7.802 | 26.821 | 0.000 | 0.000 | 0.000 |
| TECHNOLOGY | 13,100 | 3.955 | 19.490 | 0.000 | 0.000 | 0.000 |
| TELECOMMUNICATION | 13,100 | 6.344 | 24.376 | 0.000 | 0.000 | 0.000 |
| SERVICES |  |  |  |  |  |  |
| UTILITIES |  |  |  |  |  |  |

Mean. standard deviation and percentiles. ED_SCORE is calculated as the aggregation of the 54 items considered. Each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise; LME is measured as Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy; DEVEP is calculated as Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a emerging country; BOARD_STRUCTURE is determined as Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board; INDEP_MEMBERS is the ratio between the total number of independent directors on boards and the total number of directors on boards; BSIZE $\overline{\text { is }}$ the total number of directors on boards; BMEET is the numbers of meetings held by boards each year; CEODUALITY is the Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0, otherwise; SIZE is the $\log$ of total sales; ROA is operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMM Tis the Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0 , otherwise; BASIC MATERIALS if the company operates in Basic Materials sector and 0, otherwise; CONSUMER CYCLICALS if the company operates in Consumer Cyclicals sector and 0 , otherwise; CONSUMER NON-CYCLICALS if the company operates in Consumer Non-Cyclicals sector and 0 , otherwise; ENERGY if the company operates in Energy sector and 0, otherwise; HEALTHCARE if the company operates in Healthcare sector and 0 , otherwise; INDUSTRIALS if the company operates in Industrials sector and 0 , otherwise; TECHNOLOGY if the company operates in Technology sector and 0, otherwise; TELECOMMUNICATION SERVICES if the company operates in Telecommunication Services sector and 0 , otherwise; UTILITIES if the company operates in Utilities sector and 0 , otherwise.

Table 5

## Correlation Matrix

|  |  |  |  |  |  |  |  | Corr | lation | Matrix |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | ${ }^{(6)}$ | (7) | ${ }^{(8)}$ | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) |
| ED_SCore (1) | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LME (2) | 0.062 *** | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Devep (3) | $0.063^{* * *}$ | 0.696*** | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BOARD_Structure (4) | $-0.188^{* * *}$ | 0.011 | 0.013 | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| INDEP_MEMBERS (5) | $-0.022^{* *}$ | 0.251*** | $0.249^{* * *}$ | 0.387*** | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BSIZE (6) | $0.313^{* * *}$ | $-0.077^{* * *}$ | -0.073*** | -0.05*** | -0.077*** | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BMEET (7) | $0.080 * * *$ | $-0.044 * * *$ | ${ }^{-0.040 * * *}$ | $-0.160^{* * *}$ | -0.112*** | -0.085*** | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ceoduality (8) | ${ }^{0.017 *}$ | $0^{0.085 * * *}$ | 0.089*** | $0.170^{* * *}$ | $0.192^{* * *}$ | ${ }^{0.091 * * *}$ | $-0.105^{* * *}$ | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SIZE (9) | 0.505*** | $-0.057^{* * *}$ | -0.056*** | $-0.112^{* * *}$ | $0.041^{* * *}$ | ${ }^{0.501 * * *}$ | 0.046*** | $0.133^{* * *}$ | 1.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| ROA (10) | -0.134*** | $-0.098 * * *$ | $-0.099 * * *$ | 0.210*** | $0.093^{* * *}$ | -0.085*** | $-0.233^{* * *}$ | 0.023*** | ${ }^{-0.199 * * *}$ | 1.000 |  |  |  |  |  |  |  |  |  |  |  |
| LEV (11) | $0.141^{* * *}$ | -0.000 | 0.003 | $-0.076^{* * *}$ | ${ }^{-0.013}$ | $0.174^{* * *}$ | 0.092*** | 0.024*** | ${ }^{0.285 * *}$ | $-0.379^{* * *}$ | 1.000 |  |  |  |  |  |  |  |  |  |  |
| CSR_COMmT (12) | 0.616*** | 0.051 *** | $0.053^{* * *}$ | ${ }^{-0.066 * * *}$ | 0.011 | ${ }^{0.184 * * *}$ | $0.111^{* * *}$ | $-0.029 * * *$ | $0^{0.289 * * *}$ | ${ }^{-0.131^{* * *}}$ | $0.102^{* * *}$ | 1.000 |  |  |  |  |  |  |  |  |  |
| basic materials (13) | $0.053^{* * *}$ | $-0.051 * * *$ | $-0.052^{* * *}$ | ${ }^{-0.046 * * *}$ | 0.000 | $-0.064 * *$ | ${ }^{0.013}$ | $-0.087 * * *$ | ${ }^{-0.061 * * *}$ | $-0.074 * * *$ | ${ }^{-0.047 * * *}$ | ${ }^{0.085 * * *}$ | 1.000 |  |  |  |  |  |  |  |  |
| CONSUMER CYClicals (14) | $-0.053 * * *$ | 0.079*** | ${ }^{0.078 * *}$ | ${ }^{0.041^{* * *}}$ | ${ }^{-0.066 * * *}$ | ${ }^{-0.015 *}$ | ${ }^{-0.105 * * *}$ | ${ }^{0.011}$ | ${ }^{-0.083 * * *}$ | ${ }^{0.030 * * *}$ | $-0.033^{* * *}$ | ${ }^{-0.049 * * *}$ | ${ }^{-0.195 * * *}$ | 1.000 |  |  |  |  |  |  |  |
| CONSUMER Non-CyClicals (15) | 0.025*** | $-0.023 * * *$ | ${ }^{-0.024 * * *}$ | $0.034^{* * *}$ | ${ }^{-0.036 * * *}$ | ${ }^{0.063^{* * *}}$ | ${ }^{-0.020^{* *}}$ | ${ }^{0.003}$ | ${ }^{0.006}$ | ${ }^{0.057 * * *}$ | $0.045^{* * *}$ | 0.033*** | ${ }^{-0.134 * * *}$ | -0.159*** | 1.000 |  |  |  |  |  |  |
| ENERGY (16) | $-0.059 * * *$ | $-0.123^{* * *}$ | $-0.122^{* * *}$ | ${ }^{0.087 * * *}$ | ${ }^{0.076 * *}$ | -0.0169 | ${ }^{0.010}$ | ${ }^{0.012}$ | ${ }^{0.093 * * *}$ | ${ }^{0.043^{* * *}}$ | ${ }^{-0.097 * * *}$ | ${ }^{0.001}$ | ${ }^{-0.133^{* * *}}$ | ${ }^{-0.161 * * *}$ | $-0.110^{* * *}$ | 1.000 |  |  |  |  |  |
| healthcare (17) | $-0.064 * * *$ | 0.057*** | $0.057^{* * *}$ | ${ }^{-0.003}$ | 0.087** | -0.074** | ${ }^{-0.016^{* *}}$ | 0.024*** | ${ }^{-0.075 * * *}$ | 0.087*** | ${ }^{-0.091 * * *}$ | -0.046*** | ${ }^{-0.117^{* * *}}$ | $-0.139 * * *$ | $-0.096 * * *$ | ${ }^{-0.097 * * *}$ | 1.000 |  |  |  |  |
| Industrials (18) | ${ }^{0.019 * *}$ | 0.071*** | $0.070^{* * *}$ | ${ }^{-0.119 * * *}$ | ${ }^{-0.075 * * *}$ | 0.038*** | ${ }^{0.022 * *}$ | ${ }^{0.013}$ | ${ }^{0.002}$ | ${ }^{-0.081 * * *}$ | $0.131^{* * *}$ | ${ }^{-0.011}$ | ${ }^{-0.117 * * *}$ | ${ }^{-0.139 * * *}$ | ${ }^{-0.996 * * *}$ | ${ }^{-0.097 * * *}$ | ${ }^{-0.043^{* * *}}$ | 1.000 |  |  |  |
| technology (19) | ${ }^{0.013}$ | $0^{0.046 * * *}$ | 0.045*** | $0.026^{* * *}$ | ${ }^{0.052^{* * * *}}$ | $-0.079 * * * *$ | 0.006 | ${ }^{0.023}$ | ${ }^{-0.065^{* * *}}$ | ${ }^{0.103}$ | $-0.219^{* * *}$ | $-0.056 * * *$ | ${ }^{-0.118 * * *}$ | $-0.140 * * *$ | $-0.096 * * *$ | ${ }^{-0.097 * * *}$ | $-0.084 * * * *$ | ${ }^{-0.152^{* * *}}$ | 1.000 |  |  |
| telecommunication services (20) | -0.014 | $-0.059 * * *$ | ${ }^{-0.047 * * *}$ | ${ }^{-0.008}$ | $-0.022^{* *}$ | $0^{0.073^{* * *}}$ | 0.990*** | ${ }^{-0.012}$ | ${ }^{0.105^{* * *}}$ | ${ }^{-0.009}$ | $0.113^{* * *}$ | ${ }^{-0.013}$ | ${ }^{-0.082 * * *}$ | ${ }^{-0.098 * * *}$ | -0.067**** | ${ }^{-0.068 * * *}$ | ${ }^{-0.059}$ | $-0.106^{* * *}$ | ${ }^{-0.059 * * *}$ |  |  |
| UTLITITES (21) | 0.087*** | -0.060*** | ${ }^{-0.061 * * *}$ | 0.033*** | ${ }^{0.041 * * *}$ | 0.104*** | 0.064*** | 0.022** | $0^{0.164 * * *}$ | ${ }^{-0.132 * * *}$ | $0.215^{* * *}$ | 0.054*** | ${ }^{-0.105 * * *}$ | -0.125*** | $-0.086 * * *$ | ${ }^{-0.087 * * *}$ | ${ }^{-0.076 * * *}$ | -0.136*** | ${ }^{-0.076 * * *}$ | $-0.053^{* * *}$ | 1.000 |

Correlation matrix. ED_SCORE is calculated as the aggregation of the 54 items considered. Each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise; LME is measured as Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy; DEVEP is calculated as Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a emerging country; BOARD_STRUCTURE is determined as Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board; INDEP_MEMBERS is the ratio between the total number of independent directors on boards and the total number of directors on boards; BSIZE is the total number of directors on boards; BMEET is the numbers of meetings held by boards each year; CEODUALITY is the Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0 , otherwise; SIZE is the log of total sales; ROA is operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is the Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0 , otherwise; BASIC MATERIALS if the company operates in Basic Materials sector and 0 , otherwise; CONSUMER CYCLICALS if the company operates in Consumer Cyclicals sector and 0 , otherwise; CONSUMER NON-CYCLICALS if the company operates in Consumer Non-Cyclicals sector and 0 , otherwise; ENERGY if the company operates in Energy sector and 0 , otherwise; HEALTHCARE if the company operates in Healthcare sector and 0 , otherwise; INDUSTRIALS if the company operates in Industrials sector and 0 , otherwise; TECHNOLOGY if the company operates in Technology sector and 0 , otherwise; TELECOMMUNICATION SERVICES if the company operates in Telecommunication Services sector and 0 , otherwise; UTILITIES if the company operates in Utilities sector and 0 , otherwise. ${ }^{*}$ p-value $<0.1 * * p-$ value $<0.05 * * *$ p-value $<0.01$

Table 6
Multivariate analysis results

| ED_SCORE | $\begin{gathered} \text { MODEL } 1 \\ \text { Coef. } \\ \text { P>\|t\| } \end{gathered}$ | MODEL 2 Coef. $\mathrm{P}>\|\mathrm{t}\|$ | $\begin{gathered} \text { MODEL } 3 \\ \text { Coef. } \\ \text { P>\|t\| } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| LME | $\begin{gathered} 3.969 * * * \\ (0.000) \end{gathered}$ |  |  |
| DEVEP |  | $\begin{gathered} 4.001 * * * \\ (0.000) \end{gathered}$ |  |
| BOARD_STRUCTURE |  |  | $\begin{gathered} -1.848 * * * \\ (0.000) \end{gathered}$ |
| INDEP_MEMBERS | $\begin{gathered} -0.009^{* *} \\ (0.014) \end{gathered}$ | $\begin{gathered} -0.010^{* *} \\ (0.014) \end{gathered}$ | $\begin{aligned} & -0.005 \\ & (0.136) \end{aligned}$ |
| BSIZE | $\begin{gathered} 0.212 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.213 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.209 * * * \\ (0.000) \end{gathered}$ |
| BMEET | $\begin{aligned} & -0.018 \\ & (0.140) \end{aligned}$ | $\begin{gathered} -0.019 \\ (0.138) \end{gathered}$ | $\begin{gathered} -0.026^{* *} \\ (0.036) \end{gathered}$ |
| CEODUALITY | $\begin{gathered} 0.129 \\ (0.340) \end{gathered}$ | $\begin{gathered} 0.130 \\ (0.343) \end{gathered}$ | $\begin{gathered} 0.209 \\ (0.126) \end{gathered}$ |
| SIZE | $\begin{aligned} & 0.048^{*} \\ & (0.082) \end{aligned}$ | $\begin{aligned} & 0.049^{*} \\ & (0.081) \end{aligned}$ | $\begin{aligned} & 0.046^{*} \\ & (0.094) \end{aligned}$ |
| ROA | $\begin{aligned} & -0.011^{*} \\ & (0.076) \end{aligned}$ | $\begin{aligned} & -0.012 * \\ & (0.076) \end{aligned}$ | $\begin{aligned} & -0.011^{*} \\ & (0.072) \end{aligned}$ |
| LEV | $\begin{gathered} 0.000 \\ (0.730) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.730) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.721) \end{gathered}$ |
| CSR_COMMT | $\begin{gathered} 3.256 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 3.257 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 3.288 * * * \\ (0.000) \end{gathered}$ |
| BASIC MATERIALS | $\begin{gathered} 0.965 \\ (0.454) \end{gathered}$ | $\begin{gathered} 1.036 \\ (0.422) \end{gathered}$ | $\begin{gathered} 1.216 \\ (0.343) \end{gathered}$ |
| CONSUMER CYCLICALS | $\begin{aligned} & -0.957 \\ & (0.446) \end{aligned}$ | $\begin{aligned} & -0.888 \\ & (0.479) \end{aligned}$ | $\begin{aligned} & -0.351 \\ & (0.778) \end{aligned}$ |
| CONSUMER NON-CYCLICALS | $\begin{gathered} 0.989 \\ (0.461) \end{gathered}$ | $\begin{gathered} 1.606 \\ (0.430) \end{gathered}$ | $\begin{gathered} 1.296 \\ (0.332) \end{gathered}$ |
| ENERGY | $\begin{aligned} & -1.694 \\ & (0.201) \end{aligned}$ | $\begin{aligned} & -1.621 \\ & (0.221) \end{aligned}$ | $\begin{aligned} & -1.535 \\ & (0.244) \end{aligned}$ |
| HEALTHCARE | $\begin{aligned} & -1.807 \\ & (0.196) \end{aligned}$ | $\begin{aligned} & -1.738 \\ & (0.213) \end{aligned}$ | $\begin{aligned} & -1.298 \\ & (0.349) \end{aligned}$ |
| INDUSTRIALS | $\begin{gathered} 0.999 \\ (0.423) \end{gathered}$ | $\begin{gathered} 1.067 \\ (0.391) \end{gathered}$ | $\begin{gathered} 1.331 \\ (0.282) \end{gathered}$ |
| TECHNOLOGY | $\begin{gathered} 0.631 \\ (0.649) \end{gathered}$ | $\begin{gathered} 0.699 \\ (0.614) \end{gathered}$ | $\begin{gathered} 1.238 \\ (0.369) \end{gathered}$ |
| TELECOMMUNICATION SERVICES | $\begin{gathered} 3.625^{* *} \\ (0.013) \\ \hline \end{gathered}$ | $\begin{gathered} 3.698^{* *} \\ (0.011) \\ \hline \end{gathered}$ | $\begin{gathered} 3.868^{* * *} \\ (0.008) \end{gathered}$ |
| N | 13,100 | 13,100 | 13,100 |
| Test statistic | 19217.23*** | 19217.62*** | 19196.23*** |

ED_SCORE is calculated as the aggregation of the 54 items considered. Each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise; LME is measured as Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy; DEVEP is calculated as Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a emerging country; BOARD_STRUCTURE is determined as Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board; INDEP_MEMBERS is the ratio between the total number of independent directors on boards and the total number of directors on boards; BSIZE is the total number of directors on boards; BMEET is the numbers of meetings held by boards each year; CEODUALITY is the Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0, otherwise; SIZE is the $\log$ of total sales; ROA is operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is the Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0, otherwise; BASIC MATERIALS if the company operates in Basic Materials sector and 0 , otherwise; CONSUMER CYCLICALS if the company operates in Consumer Cyclicals sector and 0 , otherwise; CONSUMER NONCYCLICALS if the company operates in Consumer Non-Cyclicals sector and 0, otherwise; ENERGY if the company operates in Energy sector and 0 , otherwise; HEALTHCARE if the company operates in Healthcare sector and 0 , otherwise; INDUSTRIALS if the company operates in Industrials sector and 0, otherwise; TECHNOLOGY if the company operates in Technology sector and 0, otherwise; TELECOMMUNICATION SERVICES if the company operates in Telecommunication Services sector and 0 , otherwise; UTILITIES if the company operates in Utilities sector and 0 , otherwise. ${ }^{*}$ p-value $<0.1 * *$ p-value $<0.05 * * *$ p-value $<0.01$

Table 7
Estimates of the baseline models lagging the independent variables

| ED_SCORE | $\begin{gathered} \text { MODEL } 1 \\ \text { Coef. } \\ \text { P>\|t\| } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { MODEL } 2 \\ \text { Coef. } \\ \text { P>\|t\| } \\ \hline \end{gathered}$ | $\begin{gathered} \text { MODEL } 3 \\ \text { Coef. } \\ P>\|t\| \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| LME $_{\text {- }}$ | $\begin{gathered} 4.034 * * * \\ (0.000) \end{gathered}$ |  |  |
| DEVEP $_{-1}$ |  | $\begin{gathered} 4.071 * * * \\ (0.000) \end{gathered}$ |  |
| BOARD_STRUCTURE-1 |  |  | $\begin{gathered} -1.740 * * * \\ (0.000) \end{gathered}$ |
| INDEP_MEMBERS | $\begin{gathered} -0.013 * * * \\ (0.001) \end{gathered}$ | $\begin{gathered} -0.013^{* * *} \\ (0.000) \end{gathered}$ | $\begin{gathered} -0.009^{* *} \\ (0.027) \end{gathered}$ |
| BSIZE | $\begin{gathered} 0.194 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.194^{* * *} \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.191^{* * *} \\ (0.000) \end{gathered}$ |
| BMEET | $\begin{aligned} & -0.020 \\ & (0.127) \end{aligned}$ | $\begin{aligned} & -0.020 \\ & (0.125) \end{aligned}$ | $\begin{gathered} -0.029 * * \\ (0.030) \end{gathered}$ |
| CEODUALITY | $\begin{gathered} 0.107 \\ (0.442) \end{gathered}$ | $\begin{gathered} 0.106 \\ (0.445) \end{gathered}$ | $\begin{gathered} 0.167 \\ (0.229) \end{gathered}$ |
| SIZE | $\begin{gathered} 0.030 \\ (0.319) \end{gathered}$ | $\begin{gathered} 0.029 \\ (0.318) \end{gathered}$ | $\begin{gathered} 0.029 \\ (0.325) \end{gathered}$ |
| ROA | $\begin{aligned} & -0.012^{*} \\ & (0.065) \end{aligned}$ | $\begin{aligned} & -0.012 * \\ & (0.065) \end{aligned}$ | $\begin{gathered} -0.013^{* *} \\ (0.048) \end{gathered}$ |
| LEV | $\begin{gathered} 0.000 \\ (0.591) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.591) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.579) \end{gathered}$ |
| CSR_COMMT | $\begin{gathered} 3.398^{* * *} \\ (0.000) \end{gathered}$ | $\begin{gathered} 3.397 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 3.416^{* * *} \\ (0.000) \end{gathered}$ |
| BASIC MATERIALS | $\begin{gathered} 0.849 \\ (0.515) \end{gathered}$ | $\begin{gathered} 0.927 \\ (0.477) \end{gathered}$ | $\begin{gathered} 1.064 \\ (0.413) \end{gathered}$ |
| CONSUMER CYCLICALS | $\begin{gathered} -1.094 \\ (0.389) \end{gathered}$ | $\begin{aligned} & -1.020 \\ & (0.421) \end{aligned}$ | $\begin{aligned} & -0.497 \\ & (0.694) \end{aligned}$ |
| CONSUMER NON-CYCLICALS | $\begin{gathered} 1.053 \\ (0.440) \end{gathered}$ | $\begin{aligned} & 1.129 \\ & (0.407) \end{aligned}$ | $\begin{aligned} & 1.392 \\ & (0.305) \end{aligned}$ |
| ENERGY | $\begin{aligned} & -1.759 \\ & (0.189) \end{aligned}$ | $\begin{aligned} & -1.680 \\ & (0.210) \end{aligned}$ | $\begin{aligned} & -1.620 \\ & (0.225) \end{aligned}$ |
| HEALTHCARE | $\begin{gathered} -1.674 \\ (0.237) \end{gathered}$ | $\begin{aligned} & -1.599 \\ & (0.259) \end{aligned}$ | $\begin{aligned} & -1.212 \\ & (0.390) \end{aligned}$ |
| INDUSTRIALS | $\begin{gathered} 0.719 \\ (0.569) \end{gathered}$ | $\begin{gathered} 0.793 \\ (0.529) \end{gathered}$ | $\begin{gathered} 1.057 \\ (0.400) \end{gathered}$ |
| TECHNOLOGY | $\begin{gathered} 1.371 \\ (0.331) \end{gathered}$ | $\begin{gathered} 1.445 \\ (0.305) \end{gathered}$ | $\begin{gathered} 1.925 \\ (0.170) \end{gathered}$ |
| TELECOMMUNICATION SERVICES | $\begin{array}{r} 3.340^{* *} \\ (0.023) \\ \hline \end{array}$ | $\begin{array}{r} 3.418^{* *} \\ (0.020) \\ \hline \end{array}$ | $\begin{array}{r} 3.555^{* *} \\ (0.015) \\ \hline \end{array}$ |
| N | 13.100 | 13.100 | 13.100 |
| Test statistic | 12217.59*** | 12218.00*** | 12202.07*** |

ED SCORE is calculated as the aggregation of the 54 items considered. Each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise; LME is measured as Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy; DEVEP is calculated as Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a emerging country; BOARD_STRUCTURE is determined as Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board; INDEP_MEMBERS is the ratio between the total number of independent directors on boards and the total number of directors on boards; BSIZE is the total number of directors on boards; BMEET is the numbers of meetings held by boards each year; CEODUALITY is the Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0, otherwise; SIZE is the $\log$ of total sales; ROA is operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is the Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0 , otherwise; BASI $\bar{C}$ MATERIALS if the company operates in Basic Materials sector and 0 , otherwise; CONSUMER CYCLICALS if the company operates in Consumer Cyclicals sector and 0 , otherwise; CONSUMER NONCYCLICALS if the company operates in Consumer Non-Cyclicals sector and 0, otherwise; ENERGY if the company operates in Energy sector and 0 , otherwise; HEALTHCARE if the company operates in Healthcare sector and 0 , otherwise; INDUSTRIALS if the company operates in Industrials sector and 0 , otherwise; TECHNOLOGY if the company operates in Technology sector and 0, otherwise; TELECOMMUNICATION SERVICES if the company operates in Telecommunication Services sector and 0 , otherwise; UTILITIES if the company operates in Utilities sector and 0 , otherwise. ${ }^{*}$ p-value $<0.1 * *$ p-value $<0.05 * * *$ p-value $<0.01$

Table 8
Results of the Tobit regressions for models

| ED_SCORE_MEAN | $\begin{aligned} & \text { MODEL } 1 \\ & \text { Coef. } \\ & \mathrm{P}>\|\mathbf{t}\| \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { MODEL } 2 \\ \text { Coef. } \\ \mathrm{P}>\|\mathrm{t}\| \\ \hline \end{gathered}$ | $\begin{gathered} \text { MODEL } 3 \\ \text { Coef. } \\ \text { P>\|t\| } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| LME | $\begin{gathered} 0.073 * * * \\ (0.000) \end{gathered}$ |  |  |
| DEVEP |  | $\begin{gathered} 0.074 * * * \\ (0.000) \end{gathered}$ |  |
| BOARD_STRUCTURE |  |  | $\begin{gathered} -0.034 * * * \\ (0.000) \end{gathered}$ |
| INDEP_MEMBERS | $\begin{gathered} -0.000^{* *} \\ (0.014) \end{gathered}$ | $\begin{gathered} -0.000^{* *} \\ (0.014) \end{gathered}$ | $\begin{aligned} & -0.001 \\ & (0.136) \end{aligned}$ |
| BSIZE | $\begin{gathered} 0.003 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.003^{* * *} \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.004 * * * \\ (0.000) \end{gathered}$ |
| BMEET | $\begin{aligned} & -0.000 \\ & (0.140) \end{aligned}$ | $\begin{aligned} & -0.000 \\ & (0.138) \end{aligned}$ | $\begin{gathered} -0.000 * * \\ (0.036) \end{gathered}$ |
| CEODUALITY | $\begin{gathered} 0.002 \\ (0.340) \end{gathered}$ | $\begin{gathered} 0.002 \\ (0.343) \end{gathered}$ | $\begin{gathered} 0.003 \\ (0.126) \end{gathered}$ |
| SIZE | $\begin{aligned} & 0.001^{*} \\ & (0.082) \end{aligned}$ | $\begin{aligned} & 0.001^{*} \\ & (0.081) \end{aligned}$ | $\begin{aligned} & 0.000^{*} \\ & (0.094) \end{aligned}$ |
| ROA | $\begin{aligned} & -0.000^{*} \\ & (0.076) \end{aligned}$ | $\begin{aligned} & -0.000^{*} \\ & (0.076) \end{aligned}$ | $\begin{aligned} & -0.000^{*} \\ & (0.072) \end{aligned}$ |
| LEV | $\begin{gathered} 0.000 \\ (0.730) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.730) \end{gathered}$ | $\begin{gathered} 0.000 \\ (0.721) \end{gathered}$ |
| CSR_COMMT | $\begin{gathered} 0.060 * * * \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.060^{* * *} \\ (0.000) \end{gathered}$ | $\begin{gathered} 0.610^{* * *} \\ (0.000) \end{gathered}$ |
| BASIC MATERIALS | $\begin{gathered} 0.018 \\ (0.454) \end{gathered}$ | $\begin{gathered} 0.019 \\ (0.422) \end{gathered}$ | $\begin{gathered} 0.023 \\ (0.343) \end{gathered}$ |
| CONSUMER CYCLICALS | $\begin{aligned} & -0.018 \\ & (0.446) \end{aligned}$ | $\begin{aligned} & -0.016 \\ & (0.479) \end{aligned}$ | $\begin{aligned} & -0.007 \\ & (0.778) \end{aligned}$ |
| CONSUMER NON-CYCLICALS | $\begin{gathered} 0.018 \\ (0.461) \end{gathered}$ | $\begin{gathered} 0.019 \\ (0.430) \end{gathered}$ | $\begin{gathered} 0.024 \\ (0.332) \end{gathered}$ |
| ENERGY | $\begin{aligned} & -0.031 \\ & (0.201) \end{aligned}$ | $\begin{aligned} & -0.030 \\ & (0.221) \end{aligned}$ | $\begin{aligned} & -0.028 \\ & (0.224) \end{aligned}$ |
| HEALTHCARE | $\begin{aligned} & -0.033 \\ & (0.196) \end{aligned}$ | $\begin{aligned} & -0.032 \\ & (0.213) \end{aligned}$ | $\begin{aligned} & -0.024 \\ & (0.394) \end{aligned}$ |
| INDUSTRIALS | $\begin{gathered} 0.018 \\ (0.423) \end{gathered}$ | $\begin{gathered} 0.019 \\ (0.391) \end{gathered}$ | $\begin{gathered} 0.025 \\ (0.282) \end{gathered}$ |
| TECHNOLOGY | $\begin{gathered} 0.012 \\ (0.649) \end{gathered}$ | $\begin{gathered} 0.012 \\ (0.614) \end{gathered}$ | $\begin{gathered} 0.023 \\ (0.369) \end{gathered}$ |
| TELECOMMUNICATION SERVICES | $\begin{array}{r} 0.067 * * \\ (0.013) \\ \hline \end{array}$ | $\begin{array}{r} 0.068^{* *} \\ (0.011) \\ \hline \end{array}$ | $\begin{gathered} 0.071^{* * *} \\ (0.008) \\ \hline \end{gathered}$ |
| N | 13.100 | 13.100 | 13.100 |
| Test statistic | 19217.34*** | 19217.72*** | 19196.33*** |

ED_ SCORE is calculated as the ratio between the aggregation of the 54 items considered (each item will take the value 1 if the item considered is disclosed by the firm and 0 , otherwise) and the total number of items considered; LME is measured as Dummy variable equals value 1 if the country operates in a liberal market economy and 0 if the country operates in a coordinated market economy; DEVEP is calculated as Dummy variable equals value 1 if the firm operates in a developed country and 0 if the firm operates in a emerging country; BOARD_STRUCTURE is determined as Dummy variable equals value 1 if the company has a one-tier board and 0 if the company has a two-tier board; INDEP MEMBERS is the ratio between the total number of independent directors on boards and the total number of directors on boards; BSIZE is the total number of directors on boards; BMEET is the numbers of meetings held by boards each year; CEODUALITY is the Dummy variable equals value 1 if the same person serves simultaneously as CEO and President of the board and 0 , otherwise; SIZE is the log of total sales; ROA is operate income before interests and taxes over total assets; LEV is the debt over total assets; CSR_COMMT is the Dummy variable equals value 1 if the firms have a Corporate Social Responsibility Committees and 0 , otherwise; BASIC MATERIALS if the company operates in Basic Materials sector and 0, otherwise; CONSUMER CYCLICALS if the company operates in Consumer Cyclicals sector and 0, otherwise; CONSUMER NON-CYCLICALS if the company operates in Consumer NonCyclicals sector and 0, otherwise; ENERGY if the company operates in Energy sector and 0, otherwise; HEALTHCARE if the company operates in Healthcare sector and 0, otherwise; INDUSTRIALS if the company operates in Industrials sector and 0, otherwise; TECHNOLOGY if the company operates in Technology sector and 0 , otherwise; TELECOMMUNICATION SERVICES if the company operates in Telecommunication Services sector and 0, otherwise; UTILITIES if the company operates in Utilities sector and 0 , otherwise. *pvalue $<0.1$ **p-value $<0.05 * * *$ p-value $<0.01$

