# Online-Appendix

# „The Impact of Female Board Members on ESG Performance: An Empirical Analysis“

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## List of Appendix Figures and Tables

# Appendix A: Definitions of Variables

**Appendix Table 1: Definitions of Variables**

| Variable | Definition |
|---|---|
| *Dependent Variable* | |
| ESG | Refinitiv ESG score in year t+1 (scale 0-1) |
| EnvSocMean | Mean of the Refinitiv environmental and social score in year t+1 (scale 0-1) |
| *Independent Variables* | |
| MBGend | Percentage of female members in the management board |
| SBGend | Percentage of female members in the supervisory board |
| MBWomen | Number of female members in the management board |
| SBWomen | Number of female members in the supervisory board |
| Women0 | Equal to one if there are no female members in the management board, and zero otherwise |
| Women1 | Equal to one if there is at least one female members in the management board, and zero otherwise |
| Women2 | Equal to one if there are at least two female members in the management board, and zero otherwise |
| Women3 | Equal to one if there are at least three female members in the management board, and zero otherwise |
| CEO | Equal to one if the CEO is female, and zero otherwise |
| *Control Variables* | |
| MBSize | Size of the management board |
| SBSize | Size of the supervisory board |
| DebtRatio | Ratio of total debt to total assets |
| LogTA | Natural logarithm of total assets |
| ROA | Return on assets |
| SBMeetings | Number of supervisory board meetings |
| SBIndependence | Ratio of independent supervisory board members to total supervisory board size |
| CSRCommittee | Equal to one if the company has a CSR committee, and zero otherwise |
| SusCompIncen | Equal to one if the management board members' salary are linked to sustainability targets, and zero otherwise |
| LogMarketCap | Natural logarithm of the market capitalization |

# Appendix B: R Output

## Descriptive Statistics

```
library(dplyr)
library(xlsx)
library(Hmisc)
corrsample <- subset(sample, select = c("ESG", "EnvSocMean", "MBGend",
"SBGend", "MBWomen", "SBWomen", "CEO", "MBSize", "SBSize", "DebtRatio"
, "LogTA", "LogMarketCap", "ROA", "SBMeetings", "SBIndependence", "CSR
Committee", "SusCompIncen","Women0", "Women1", "Women2", "Women3") )
corrsamplesummary <- data.frame(
  Mean = sapply(corrsample, mean),
  SD = sapply(corrsample, sd),
  Min = sapply(corrsample, min),
  Median = sapply(corrsample, median),
  Max = sapply(corrsample, max)
)
write.xlsx(corrsamplesummary, file="DescStat.xlsx")
```

| | Mean | SD | Min | Median | Max |
|---|---|---|---|---|---|
| ESG | 0.616913 | 0.175991 | 0.115559 | 0.633084 | 0.932294 |
| EnvSocMea | 0.608035 | 0.201971 | 0.01181 | 0.62289 | 0.93727 |
| MBGend | 0.103112 | 0.139795 | 0 | 0 | 0.5 |
| SBGend | 0.290071 | 0.134484 | 0 | 0.333333 | 0.666667 |
| MBWomer | 0.459016 | 0.617022 | 0 | 0 | 3 |
| SBWomen | 3.386885 | 2.348255 | 0 | 4 | 9 |
| CEO | 0.039344 | 0.194732 | 0 | 0 | 1 |
| MBSize | 4 | 1.562303 | 2 | 4 | 9 |
| SBSize | 10.74754 | 5.515994 | 2 | 12 | 24 |
| DebtRatio | 0.262046 | 0.166723 | 0.000071 | 0.245431 | 1.032898 |
| LogTA | 22.17338 | 1.71655 | 18.62 | 21.96 | 26.99 |
| LogMarket | 22.00541 | 1.492093 | 18.85149 | 21.83175 | 25.7511 |
| ROA | 0.029421 | 0.063983 | -0.24325 | 0.036219 | 0.248724 |
| SBMeeting | 8.062295 | 4.947692 | 3 | 7 | 52 |
| SBIndepen | 0.528215 | 0.356121 | 0 | 0.5 | 1 |
| CSRComm | 0.783607 | 0.412462 | 0 | 1 | 1 |
| SusCompIı | 0.442623 | 0.497513 | 0 | 0 | 1 |
| Women0 | 0.596721 | 0.491362 | 0 | 1 | 1 |
| Women1 | 0.403279 | 0.491362 | 0 | 0 | 1 |
| Women2 | 0.045902 | 0.209616 | 0 | 0 | 1 |
| Women3 | 0.009836 | 0.09885 | 0 | 0 | 1 |

**Appendix Figure 2: Screenshot Descriptive Statistics**

## Pearson Correlation Matrix

```
corrsig<-rcorr(as.matrix(corrsample))
df.corrsig.r<-data.frame(corrsig$r)
df.corrsig.p<-data.frame(corrsig$P)
write.xlsx(df.corrsig.r, file="corrmat.xlsx", sheetName = "r", append =
TRUE)
write.xlsx(df.corrsig.p, file="corrmat.xlsx", sheetName = "p", append =
TRUE)
```

| | ESG | EnvSocMea | MBGend | SBGend | MBWomen | SBWomen | CEO | MBSize | SBSize | DebtRatio |
|---|---|---|---|---|---|---|---|---|---|---|
| ESG | 1 | 0.93451 | 0.212209 | 0.324744 | 0.326017 | 0.443583 | -0.028367 | 0.365603 | 0.417666 | 0.077255 |
| EnvSocMea | 0.93451 | 1 | 0.196669 | 0.300267 | 0.315413 | 0.484688 | -0.029427 | 0.383564 | 0.49009 | 0.053458 |
| MBGend | 0.212209 | 0.196669 | 1 | 0.032707 | 0.870375 | 0.159622 | 0.311674 | 0.213921 | 0.152338 | 0.138392 |
| SBGend | 0.324744 | 0.300267 | 0.032707 | 1 | 0.072141 | 0.701874 | -0.100684 | 0.152667 | 0.367949 | 0.078804 |
| MBWomen | 0.326017 | 0.315413 | 0.870375 | 0.072141 | 1 | 0.297035 | 0.177727 | 0.545985 | 0.305747 | 0.188998 |
| SBWomen | 0.443583 | 0.484688 | 0.159622 | 0.701874 | 0.297035 | 1 | -0.026203 | 0.420522 | 0.875331 | 0.112063 |
| CEO | -0.028367 | -0.029427 | 0.311674 | -0.100684 | 0.177727 | -0.026203 | 1 | -0.064875 | 0.006215 | -0.035329 |
| MBSize | 0.365603 | 0.383564 | 0.213921 | 0.152667 | 0.545985 | 0.420522 | -0.064875 | 1 | 0.454621 | 0.050678 |
| SBSize | 0.417666 | 0.49009 | 0.152338 | 0.367949 | 0.305747 | 0.875331 | 0.006215 | 0.454621 | 1 | 0.106252 |
| DebtRatio | 0.077255 | 0.053458 | 0.138392 | 0.078804 | 0.188998 | 0.112063 | -0.035329 | 0.050678 | 0.106252 | 1 |
| LogTA | 0.567628 | 0.567761 | 0.241667 | 0.289135 | 0.443464 | 0.613152 | -0.032283 | 0.52192 | 0.665181 | 0.256827 |
| LogMarket | 0.584565 | 0.54174 | 0.176123 | 0.201348 | 0.382484 | 0.428909 | -0.06129 | 0.492363 | 0.430958 | 0.05008 |
| ROA | 0.02651 | 0.02549 | 0.026687 | -0.153423 | 0.031109 | -0.16057 | 0.008875 | 0.055342 | -0.149798 | -0.266832 |
| SBMeeting | 0.075082 | 0.049443 | 0.080873 | -0.076068 | 0.060641 | -0.031243 | 0.004276 | 0.028087 | -0.027265 | 0.154667 |
| SBIndepen | 0.341546 | 0.217526 | -0.013091 | 0.081874 | 0.015005 | 0.00152 | 0.010216 | 0.023907 | -0.05898 | 0.168457 |
| CSRComm | 0.4614 | 0.448774 | 0.148636 | 0.134344 | 0.184769 | 0.208985 | 0.106348 | 0.137829 | 0.234713 | 0.11965 |
| SusCompli | 0.253975 | 0.185201 | 0.23735 | 0.146898 | 0.268244 | 0.207711 | 0.057331 | 0.126963 | 0.177501 | 0.033416 |
| Women0 | -0.30913 | -0.303777 | -0.898697 | -0.08246 | -0.906408 | -0.283415 | -0.246173 | -0.462789 | -0.293772 | -0.140597 |
| Women1 | 0.30913 | 0.303777 | 0.898697 | 0.08246 | 0.906408 | 0.283415 | 0.246173 | 0.462789 | 0.293772 | 0.140597 |
| Women2 | 0.167848 | 0.150149 | 0.363817 | -0.021266 | 0.624991 | 0.117507 | -0.044389 | 0.401788 | 0.135234 | 0.158918 |
| Women3 | 0.14245 | 0.1404 | 0.194163 | 0.085511 | 0.411123 | 0.196119 | -0.02017 | 0.255603 | 0.161424 | 0.143859 |

**Appendix Figure 3: Screenshot 1 Correlation Matrix Coefficients**

| | LogTA | LogMarket | ROA | SBMeeting | SBIndepen | CSRComm | SusCompli | Women0 | Women1 | Women2 | Women3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ESG | 0.567628 | 0.584565 | 0.02651 | 0.075082 | 0.341546 | 0.4614 | 0.253975 | -0.30913 | 0.30913 | 0.167848 | 0.14245 |
| EnvSocMea | 0.567761 | 0.54174 | 0.02549 | 0.049443 | 0.217526 | 0.448774 | 0.185201 | -0.303777 | 0.303777 | 0.150149 | 0.1404 |
| MBGend | 0.241667 | 0.176123 | 0.026687 | 0.080873 | -0.013091 | 0.148636 | 0.23735 | -0.898697 | 0.898697 | 0.363817 | 0.194163 |
| SBGend | 0.289135 | 0.201348 | -0.153423 | -0.076068 | 0.081874 | 0.134344 | 0.146898 | -0.08246 | 0.08246 | -0.021266 | 0.085511 |
| MBWomen | 0.443464 | 0.382484 | 0.031109 | 0.060641 | 0.015005 | 0.184769 | 0.268244 | -0.906408 | 0.906408 | 0.624991 | 0.411123 |
| SBWomen | 0.613152 | 0.428909 | -0.16057 | -0.031243 | 0.00152 | 0.208985 | 0.207711 | -0.283415 | 0.283415 | 0.117507 | 0.196119 |
| CEO | -0.032283 | -0.06129 | 0.008875 | 0.004276 | 0.010216 | 0.106348 | 0.057331 | -0.246173 | 0.246173 | -0.044389 | -0.02017 |
| MBSize | 0.52192 | 0.492363 | 0.055342 | 0.028087 | 0.023907 | 0.137829 | 0.126963 | -0.462789 | 0.462789 | 0.401788 | 0.255603 |
| SBSize | 0.665181 | 0.430958 | -0.149798 | -0.027265 | -0.05898 | 0.234713 | 0.177501 | -0.293772 | 0.293772 | 0.135234 | 0.161424 |
| DebtRatio | 0.256827 | 0.05008 | -0.266832 | 0.154667 | 0.168457 | 0.11965 | 0.033416 | -0.140597 | 0.140597 | 0.158918 | 0.143859 |
| LogTA | 1 | 0.775329 | -0.148025 | 0.13437 | 0.19083 | 0.339037 | 0.270837 | -0.39513 | 0.39513 | 0.265603 | 0.240774 |
| LogMarket | 0.775329 | 1 | 0.131519 | 0.055347 | 0.246886 | 0.260634 | 0.286279 | -0.33371 | 0.33371 | 0.247935 | 0.202908 |
| ROA | -0.148025 | 0.131519 | 1 | -0.252505 | 0.011166 | -0.043307 | -0.01042 | -0.019058 | 0.019058 | 0.050998 | -0.008692 |
| SBMeeting | 0.13437 | 0.055347 | -0.252505 | 1 | 0.106056 | 0.140415 | 0.032861 | -0.070817 | 0.070817 | -0.00911 | 0.045824 |
| SBIndepen | 0.19083 | 0.246886 | 0.011166 | 0.106056 | 1 | 0.24945 | 0.091467 | -0.000613 | 0.000613 | 0.010369 | 0.068626 |
| CSRComm | 0.339037 | 0.260634 | -0.043307 | 0.140415 | 0.24945 | 1 | 0.099597 | -0.221005 | 0.221005 | 0.001123 | 0.052376 |
| SusCompli | 0.270837 | 0.286279 | -0.01042 | 0.032861 | 0.091467 | 0.099597 | 1 | -0.236254 | 0.236254 | 0.183051 | 0.111845 |
| Women0 | -0.39513 | -0.33371 | -0.019058 | -0.070817 | -0.000613 | -0.221005 | -0.236254 | 1 | -1 | -0.266809 | -0.121238 |
| Women1 | 0.39513 | 0.33371 | 0.019058 | 0.070817 | 0.000613 | 0.221005 | 0.236254 | -1 | 1 | 0.266809 | 0.121238 |
| Women2 | 0.265603 | 0.247935 | 0.050998 | -0.00911 | 0.010369 | 0.001123 | 0.183051 | -0.266809 | 0.266809 | 1 | 0.454401 |
| Women3 | 0.240774 | 0.202908 | -0.008692 | 0.045824 | 0.068626 | 0.052376 | 0.111845 | -0.121238 | 0.121238 | 0.454401 | 1 |

**Appendix Figure 4: Screenshot 2 Correlation Matrix Coefficients**

| | ESG | EnvSocMe | MBGend | SBGend | MBWomer | SBWomen | CEO | MBSize | SBSize | DebtRatio |
|---|---|---|---|---|---|---|---|---|---|---|
| ESG | #NV | 0 | 0.000189 | 6.39E-09 | 5.53E-09 | 4.44E-16 | 0.621681 | 4.45E-11 | 2.62E-14 | 0.178408 |
| EnvSocMe | 0 | #NV | 0.000552 | 8.98E-08 | 1.8E-08 | 0 | 0.608709 | 3.97E-12 | 0 | 0.352148 |
| MBGend | 0.000189 | 0.000552 | #NV | 0.569345 | 0 | 0.005203 | 2.7E-08 | 0.000167 | 0.007696 | 0.015578 |
| SBGend | 6.39E-09 | 8.98E-08 | 0.569345 | #NV | 0.208987 | 0 | 0.079156 | 0.007564 | 3.27E-11 | 0.169833 |
| MBWomer | 5.53E-09 | 1.8E-08 | 0 | 0.208987 | #NV | 1.25E-07 | 0.001833 | 0 | 5.07E-08 | 0.00091 |
| SBWomen | 4.44E-16 | 0 | 0.005203 | 0 | 1.25E-07 | #NV | 0.648518 | 1.69E-14 | 0 | 0.050556 |
| CEO | 0.621681 | 0.608709 | 2.7E-08 | 0.079156 | 0.001833 | 0.648518 | #NV | 0.258677 | 0.913917 | 0.538787 |
| MBSize | 4.45E-11 | 3.97E-12 | 0.000167 | 0.007564 | 0 | 1.69E-14 | 0.258677 | #NV | 0 | 0.377786 |
| SBSize | 2.62E-14 | 0 | 0.007696 | 3.27E-11 | 5.07E-08 | 0 | 0.913917 | 0 | #NV | 0.063848 |
| DebtRatio | 0.178408 | 0.352148 | 0.015578 | 0.169833 | 0.00091 | 0.050556 | 0.538787 | 0.377786 | 0.063848 | #NV |
| LogTA | 0 | 0 | 1.98E-05 | 2.76E-07 | 4.44E-16 | 0 | 0.574367 | 0 | 0 | 5.54E-06 |
| LogMarket | 0 | 0 | 0.002019 | 0.000403 | 4.61E-12 | 4.44E-15 | 0.285975 | 0 | 3.11E-15 | 0.383442 |
| ROA | 0.644685 | 0.657467 | 0.642477 | 0.007268 | 0.588371 | 0.004939 | 0.877325 | 0.335412 | 0.008788 | 2.28E-06 |
| SBMeeting | 0.190972 | 0.389531 | 0.158868 | 0.185192 | 0.291117 | 0.586765 | 0.940714 | 0.625127 | 0.635294 | 0.006803 |
| SBIndepen | 9.04E-10 | 0.000129 | 0.819882 | 0.153753 | 0.794097 | 0.978905 | 0.858975 | 0.677513 | 0.30456 | 0.003167 |
| CSRComm | 0 | 0 | 0.009333 | 0.018913 | 0.001189 | 0.000237 | 0.063607 | 0.016009 | 3.47E-05 | 0.03675 |
| SusCompIı | 7.08E-06 | 0.001157 | 2.81E-05 | 0.010203 | 2.01E-06 | 0.00026 | 0.3183 | 0.02661 | 0.001859 | 0.561004 |
| Women0 | 3.54E-08 | 6.24E-08 | 0 | 0.150823 | 0 | 4.83E-07 | 1.37E-05 | 0 | 1.74E-07 | 0.013989 |
| Women1 | 3.54E-08 | 6.24E-08 | 0 | 0.150823 | 0 | 4.83E-07 | 1.37E-05 | 0 | 1.74E-07 | 0.013989 |
| Women2 | 0.00328 | 0.00863 | 5.61E-11 | 0.711453 | 0 | 0.04028 | 0.439868 | 2.92E-13 | 0.018131 | 0.005408 |
| Women3 | 0.012764 | 0.014124 | 0.000651 | 0.136231 | 7.19E-14 | 0.000572 | 0.725701 | 6.16E-06 | 0.004711 | 0.011897 |

**Appendix Figure 5: Screenshot 1 Correlation Matrix Significance Levels**

| | LogTA | LogMarket | ROA | SBMeeting | SBIndepen | CSRComm | SusCompIı | Women0 | Women1 | Women2 | Women3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ESG | 0 | 0 | 0.644685 | 0.190972 | 9.04E-10 | 0 | 7.08E-06 | 3.54E-08 | 3.54E-08 | 0.00328 | 0.012764 |
| EnvSocMe | 0 | 0 | 0.657467 | 0.389531 | 0.000129 | 0 | 0.001157 | 6.24E-08 | 6.24E-08 | 0.00863 | 0.014124 |
| MBGend | 1.98E-05 | 0.002019 | 0.642477 | 0.158868 | 0.819882 | 0.009333 | 2.81E-05 | 0 | 0 | 5.61E-11 | 0.000651 |
| SBGend | 2.76E-07 | 0.000403 | 0.007268 | 0.185192 | 0.153753 | 0.018913 | 0.010203 | 0.150823 | 0.150823 | 0.711453 | 0.136231 |
| MBWomer | 4.44E-16 | 4.61E-12 | 0.588371 | 0.291117 | 0.794097 | 0.001189 | 2.01E-06 | 0 | 0 | 0 | 7.19E-14 |
| SBWomen | 0 | 4.44E-15 | 0.004939 | 0.586765 | 0.978905 | 0.000237 | 0.00026 | 4.83E-07 | 4.83E-07 | 0.04028 | 0.000572 |
| CEO | 0.574367 | 0.285975 | 0.877325 | 0.940714 | 0.858975 | 0.063607 | 0.3183 | 1.37E-05 | 1.37E-05 | 0.439868 | 0.725701 |
| MBSize | 0 | 0 | 0.335412 | 0.625127 | 0.677513 | 0.016009 | 0.02661 | 0 | 0 | 2.92E-13 | 6.16E-06 |
| SBSize | 0 | 3.11E-15 | 0.008788 | 0.635294 | 0.30456 | 3.47E-05 | 0.001859 | 1.74E-07 | 1.74E-07 | 0.018131 | 0.004711 |
| DebtRatio | 5.54E-06 | 0.383442 | 2.28E-06 | 0.006803 | 0.003167 | 0.03675 | 0.561004 | 0.013989 | 0.013989 | 0.005408 | 0.011897 |
| LogTA | #NV | 0 | 0.009631 | 0.01889 | 0.000809 | 1.22E-09 | 1.58E-06 | 7.72E-13 | 7.72E-13 | 2.55E-06 | 2.13E-05 |
| LogMarket | 0 | #NV | 0.021594 | 0.335367 | 1.29E-05 | 3.97E-06 | 3.66E-07 | 2.28E-09 | 2.28E-09 | 1.18E-05 | 0.000362 |
| ROA | 0.009631 | 0.021594 | #NV | 8.03E-06 | 0.846005 | 0.451109 | 0.856183 | 0.740271 | 0.740271 | 0.37478 | 0.879838 |
| SBMeeting | 0.01889 | 0.335367 | 8.03E-06 | #NV | 0.064341 | 0.014114 | 0.567532 | 0.217488 | 0.217488 | 0.874107 | 0.425211 |
| SBIndepen | 0.000809 | 1.29E-05 | 0.846005 | 0.064341 | #NV | 1.04E-05 | 0.110894 | 0.991488 | 0.991488 | 0.85688 | 0.232093 |
| CSRComm | 1.22E-09 | 3.97E-06 | 0.451109 | 0.014114 | 1.04E-05 | #NV | 0.082464 | 9.94E-05 | 9.94E-05 | 0.984421 | 0.361994 |
| SusCompIı | 1.58E-06 | 3.66E-07 | 0.856183 | 0.567532 | 0.110894 | 0.082464 | #NV | 3.07E-05 | 3.07E-05 | 0.001323 | 0.051011 |
| Women0 | 7.72E-13 | 2.28E-09 | 0.740271 | 0.217488 | 0.991488 | 9.94E-05 | 3.07E-05 | #NV | 0 | 2.28E-06 | 0.034306 |
| Women1 | 7.72E-13 | 2.28E-09 | 0.740271 | 0.217488 | 0.991488 | 9.94E-05 | 3.07E-05 | 0 | #NV | 2.28E-06 | 0.034306 |
| Women2 | 2.55E-06 | 1.18E-05 | 0.37478 | 0.874107 | 0.85688 | 0.984421 | 0.001323 | 2.28E-06 | 2.28E-06 | #NV | 0 |
| Women3 | 2.13E-05 | 0.000362 | 0.879838 | 0.425211 | 0.232093 | 0.361994 | 0.051011 | 0.034306 | 0.034306 | 0 | #NV |

**Appendix Figure 6: Screenshot 2 Correlation Matrix Significance Levels**

## Main Regression Models

```
model1<-lm(ESG ~ MBGend + SBGend + MBSize + SBSize + DebtRatio + LogTA
+ ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen + Y
ear + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industry
_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=samp
le)
summary(model1)

Call:
lm(formula = ESG ~ MBGend + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
```

```
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47566 -0.07185  0.00890  0.07366  0.26433

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4095650  0.1405997  -2.913 0.003865 **
MBGend          0.1136050  0.0532073   2.135 0.033608 *
SBGend          0.1802332  0.0585799   3.077 0.002298 **
MBSize          0.0053395  0.0055548   0.961 0.337253
SBSize          0.0023054  0.0019181   1.202 0.230389
DebtRatio      -0.0460920  0.0465218  -0.991 0.322648
LogTA           0.0396296  0.0067778   5.847 1.38e-08 ***
ROA             0.1205257  0.1230680   0.979 0.328247
SBMeetings      0.0009301  0.0015303   0.608 0.543818
SBIndependence  0.1236099  0.0218799   5.649 3.92e-08 ***
CSRCommittee    0.1068353  0.0183780   5.813 1.65e-08 ***
SusCompIncen    0.0288350  0.0150977   1.910 0.057158 .
Year           -0.0260241  0.0143221  -1.817 0.070266 .
Industry_15    -0.0798283  0.0678544  -1.176 0.240398
Industry_20    -0.1073269  0.0641101  -1.674 0.095215 .
Industry_25    -0.1540846  0.0666992  -2.310 0.021600 *
Industry_30    -0.0809458  0.0698526  -1.159 0.247511
Industry_35    -0.0701962  0.0658615  -1.066 0.287416
Industry_45    -0.0337640  0.0644957  -0.524 0.601030
Industry_50    -0.1842303  0.0674768  -2.730 0.006725 **
Industry_55    -0.2632906  0.0781004  -3.371 0.000853 ***
Industry_60    -0.1530325  0.0699016  -2.189 0.029395 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1186 on 283 degrees of freedom
Multiple R-squared:  0.5774,   Adjusted R-squared:  0.546
F-statistic: 18.41 on 21 and 283 DF,  p-value: < 2.2e-16

model2.1<-lm(ESG ~ Women0 + SBGend + MBSize + SBSize + DebtRatio + Log
TA + ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen +
Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industr
y_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=sam
ple)
summary(model2.1)

Call:
lm(formula = ESG ~ Women0 + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47624 -0.07411  0.01022  0.07471  0.26596

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.367914   0.145491  -2.529 0.011990 *
Women0         -0.030813   0.017079  -1.804 0.072276 .
SBGend          0.180347   0.058761   3.069 0.002355 **
MBSize          0.003195   0.005850   0.546 0.585416
SBSize          0.002227   0.001922   1.159 0.247383
DebtRatio      -0.043644   0.046582  -0.937 0.349599
LogTA           0.039450   0.006807   5.795 1.81e-08 ***
ROA             0.129903   0.123101   1.055 0.292205
SBMeetings      0.001046   0.001533   0.683 0.495449
SBIndependence  0.122762   0.021923   5.600 5.08e-08 ***
CSRCommittee    0.105797   0.018497   5.720 2.71e-08 ***
SusCompIncen    0.030223   0.015084   2.004 0.046062 *
```

```
Year           -0.025574   0.014350  -1.782 0.075790 .
Industry_15    -0.079481   0.068074  -1.168 0.243964
Industry_20    -0.106456   0.064272  -1.656 0.098762 .
Industry_25    -0.153149   0.066926  -2.288 0.022854 *
Industry_30    -0.084780   0.070365  -1.205 0.229261
Industry_35    -0.068700   0.066000  -1.041 0.298802
Industry_45    -0.034518   0.064706  -0.533 0.594136
Industry_50    -0.182226   0.067608  -2.695 0.007453 **
Industry_55    -0.262945   0.078333  -3.357 0.000897 ***
Industry_60    -0.154466   0.070198  -2.200 0.028583 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 283 degrees of freedom
Multiple R-squared:  0.5755,   Adjusted R-squared:  0.5439
F-statistic: 18.27 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
model2.2<-lm(ESG ~ Women1 + SBGend + MBSize + SBSize + DebtRatio + Log
TA + ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen +
Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industr
y_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=sam
ple)
summary(model2.2)
```

```
Call:
lm(formula = ESG ~ Women1 + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47624 -0.07411  0.01022  0.07471  0.26596

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.398726   0.141936  -2.809 0.005313 **
Women1          0.030813   0.017079   1.804 0.072276 .
SBGend          0.180347   0.058761   3.069 0.002355 **
MBSize          0.003195   0.005850   0.546 0.585416
SBSize          0.002227   0.001922   1.159 0.247383
DebtRatio      -0.043644   0.046582  -0.937 0.349599
LogTA           0.039450   0.006807   5.795 1.81e-08 ***
ROA             0.129903   0.123101   1.055 0.292205
SBMeetings      0.001046   0.001533   0.683 0.495449
SBIndependence  0.122762   0.021923   5.600 5.08e-08 ***
CSRCommittee    0.105797   0.018497   5.720 2.71e-08 ***
SusCompIncen    0.030223   0.015084   2.004 0.046062 *
Year           -0.025574   0.014350  -1.782 0.075790 .
Industry_15    -0.079481   0.068074  -1.168 0.243964
Industry_20    -0.106456   0.064272  -1.656 0.098762 .
Industry_25    -0.153149   0.066926  -2.288 0.022854 *
Industry_30    -0.084780   0.070365  -1.205 0.229261
Industry_35    -0.068700   0.066000  -1.041 0.298802
Industry_45    -0.034518   0.064706  -0.533 0.594136
Industry_50    -0.182226   0.067608  -2.695 0.007453 **
Industry_55    -0.262945   0.078333  -3.357 0.000897 ***
Industry_60    -0.154466   0.070198  -2.200 0.028583 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 283 degrees of freedom
Multiple R-squared:  0.5755,   Adjusted R-squared:  0.5439
F-statistic: 18.27 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
model2.3<-lm(ESG ~ Women2 + SBGend + MBSize + SBSize + DebtRatio + Log
TA + ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen +
Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industr
y_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=sam
ple)
```

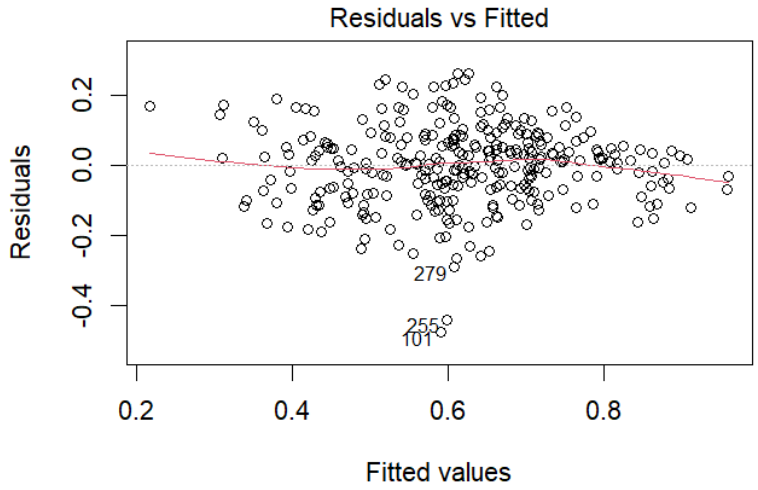
```
summary(model2.3)

Call:
lm(formula = ESG ~ Women2 + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.48970 -0.07742  0.01030  0.07490  0.25076

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.412804   0.142431  -2.898  0.00405 **
Women2          0.043734   0.038394   1.139  0.25563
SBGend          0.180756   0.059241   3.051  0.00250 **
MBSize          0.004432   0.005873   0.755  0.45111
SBSize          0.002338   0.001933   1.210  0.22746
DebtRatio      -0.042750   0.046977  -0.910  0.36359
LogTA           0.039731   0.006841   5.808 1.70e-08 ***
ROA             0.137277   0.123418   1.112  0.26696
SBMeetings      0.001091   0.001539   0.709  0.47898
SBIndependence  0.120324   0.021929   5.487 9.08e-08 ***
CSRCommittee    0.110897   0.018465   6.006 5.83e-09 ***
SusCompIncen    0.032569   0.015043   2.165  0.03122 *
Year           -0.024634   0.014383  -1.713  0.08787 .
Industry_15    -0.070252   0.068049  -1.032  0.30278
Industry_20    -0.099558   0.064353  -1.547  0.12297
Industry_25    -0.143016   0.066801  -2.141  0.03313 *
Industry_30    -0.066415   0.070001  -0.949  0.34355
Industry_35    -0.068152   0.066292  -1.028  0.30480
Industry_45    -0.029760   0.064838  -0.459  0.64659
Industry_50    -0.182492   0.067989  -2.684  0.00770 **
Industry_55    -0.251876   0.078368  -3.214  0.00146 **
Industry_60    -0.142612   0.070130  -2.034  0.04293 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1193 on 283 degrees of freedom
Multiple R-squared:  0.5725,   Adjusted R-squared:  0.5408
F-statistic: 18.05 on 21 and 283 DF,  p-value: < 2.2e-16

model2.4<-lm(ESG ~ Women3 + SBGend + MBSize + SBSize + DebtRatio + Log
TA + ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen +
Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industr
y_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=sam
ple)
summary(model2.4)

Call:
lm(formula = ESG ~ Women3 + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.49185 -0.07616  0.00691  0.07312  0.25543

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.431999   0.142110  -3.040  0.00259 **
Women3          0.023475   0.075129   0.312  0.75492
SBGend          0.172070   0.058951   2.919  0.00380 **
MBSize          0.006332   0.005635   1.124  0.26208
SBSize          0.002177   0.001932   1.126  0.26094
DebtRatio      -0.036465   0.046785  -0.779  0.43639
```

```
LogTA            0.040375   0.006843   5.900 1.03e-08 ***
ROA              0.142942   0.123607   1.156  0.24848
SBMeetings       0.001017   0.001542   0.660  0.51010
SBIndependence   0.118685   0.021945   5.408 1.35e-07 ***
CSRCommittee     0.109801   0.018477   5.943 8.23e-09 ***
SusCompIncen     0.034332   0.014988   2.291  0.02272 *
Year            -0.024046   0.014404  -1.669  0.09615 .
Industry_15     -0.067483   0.068239  -0.989  0.32355
Industry_20     -0.098116   0.064513  -1.521  0.12941
Industry_25     -0.139164   0.066900  -2.080  0.03841 *
Industry_30     -0.067030   0.070204  -0.955  0.34050
Industry_35     -0.062532   0.066360  -0.942  0.34684
Industry_45     -0.026306   0.064912  -0.405  0.68559
Industry_50     -0.177146   0.067989  -2.606  0.00966 **
Industry_55     -0.250990   0.078603  -3.193  0.00157 **
Industry_60     -0.141820   0.070326  -2.017  0.04468 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1195 on 283 degrees of freedom
Multiple R-squared:  0.5707,   Adjusted R-squared:  0.5389
F-statistic: 17.92 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
model3<-lm(ESG ~ CEO + SBGend + MBSize + SBSize + DebtRatio + LogTA + R
OA  + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen + Year
+ Industry_15 + Industry_20 + Industry_25 + Industry_30 + Industry_35 +
Industry_45 + Industry_50 + Industry_55 + Industry_60, data=sample)
summary(model3)

Call:
lm(formula = ESG ~ CEO + SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.49199 -0.07708  0.00917  0.07358  0.25415

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.431595   0.141485  -3.050  0.00250 **
CEO            -0.018870   0.036504  -0.517  0.60561
SBGend          0.169464   0.059218   2.862  0.00453 **
MBSize          0.006465   0.005571   1.160  0.24687
SBSize          0.002258   0.001937   1.166  0.24475
DebtRatio      -0.036269   0.046637  -0.778  0.43740
LogTA           0.040303   0.006833   5.898 1.04e-08 ***
ROA             0.143500   0.123497   1.162  0.24622
SBMeetings      0.001025   0.001541   0.665  0.50648
SBIndependence  0.118795   0.021931   5.417 1.30e-07 ***
CSRCommittee    0.110788   0.018591   5.959 7.52e-09 ***
SusCompIncen    0.034972   0.015013   2.329  0.02054 *
Year           -0.023550   0.014421  -1.633  0.10357
Industry_15    -0.067382   0.068183  -0.988  0.32387
Industry_20    -0.098039   0.064479  -1.520  0.12951
Industry_25    -0.139752   0.066859  -2.090  0.03749 *
Industry_30    -0.068050   0.070114  -0.971  0.33260
Industry_35    -0.062802   0.066292  -0.947  0.34427
Industry_45    -0.026940   0.064898  -0.415  0.67837
Industry_50    -0.174694   0.067926  -2.572  0.01063 *
Industry_55    -0.252350   0.078512  -3.214  0.00146 **
Industry_60    -0.140997   0.070328  -2.005  0.04593 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1195 on 283 degrees of freedom
Multiple R-squared:  0.571,    Adjusted R-squared:  0.5391
F-statistic: 17.94 on 21 and 283 DF,  p-value: < 2.2e-16
```

## Regression Assumptions

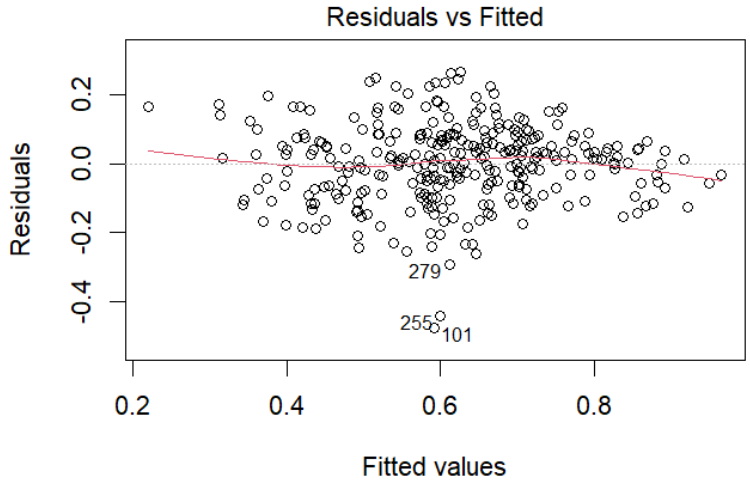
```
plot(model1, 1)
```




~ MBGend + SBGend + MBSize + SBSize + DebtRatio + LogTA + RC

**Appendix Figure 7: Residuals vs. Fits Plot Regression Model 1**

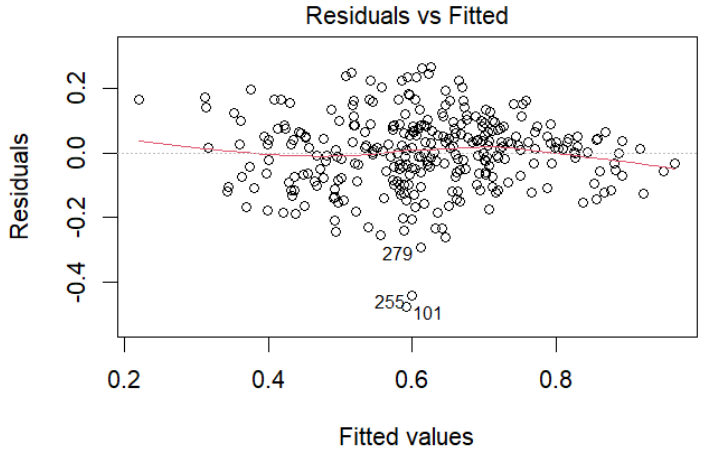
```
plot(model2.1, 1)
```




~ Women0 + SBGend + MBSize + SBSize + DebtRatio + LogTA + RC

**Appendix Figure 8: Residuals vs. Fits Plot Regression Model 2.1**

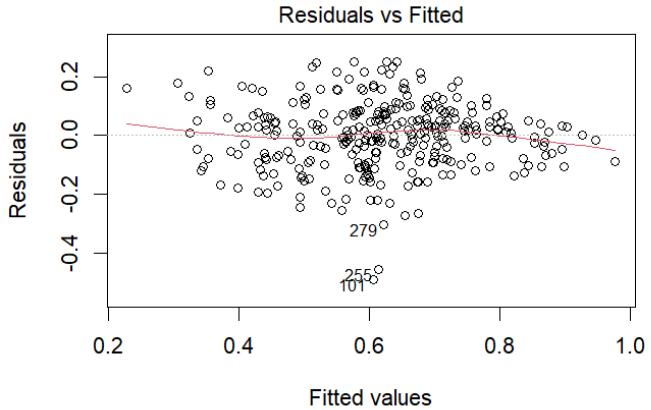
```
plot(model2.2, 1)
```




~ Women1 + SBGend + MBSize + SBSize + DebtRatio + LogTA + RC

**Appendix Figure 9: Residuals vs. Fits Plot Regression Model 2.2**

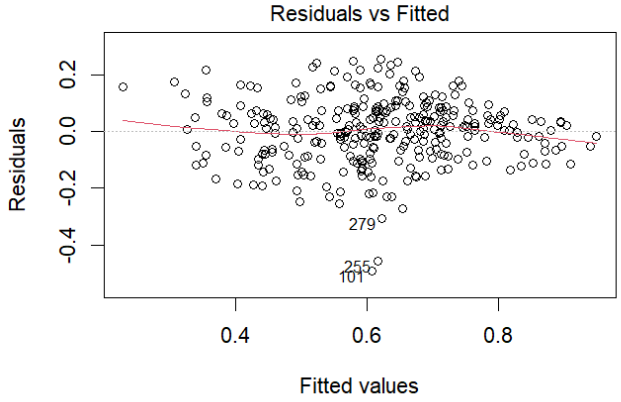
```
plot(model2.3, 1)
```




~ Women2 + SBGend + MBSize + SBSize + DebtRatio + LogTA + RC

**Appendix Figure 10: Residuals vs. Fits Plot Regression Model 2.3**

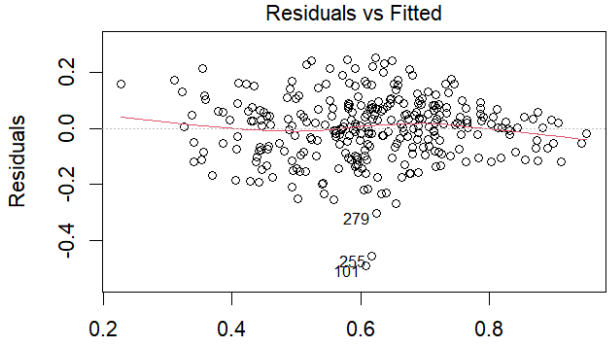
```
plot(model2.4, 1)
```




~ Women3 + SBGend + MBSize + SBSize + DebtRatio + LogTA + RC

**Appendix Figure 11: Residuals vs. Fits Plot Regression Model 2.4**

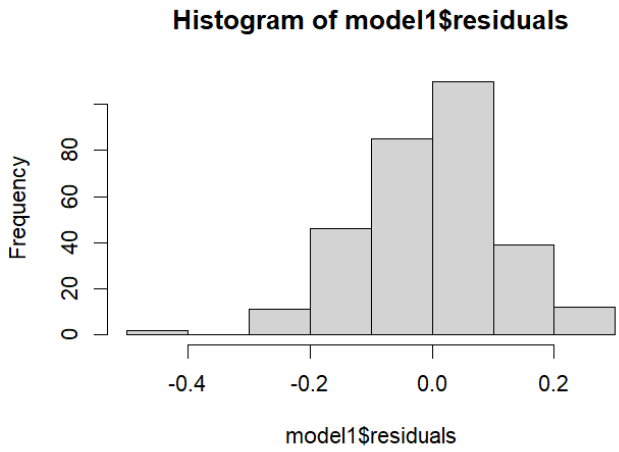
```
plot(model3, 1)
```




~ CEO + SBGend + MBSize + SBSize + DebtRatio + LogTA + ROA

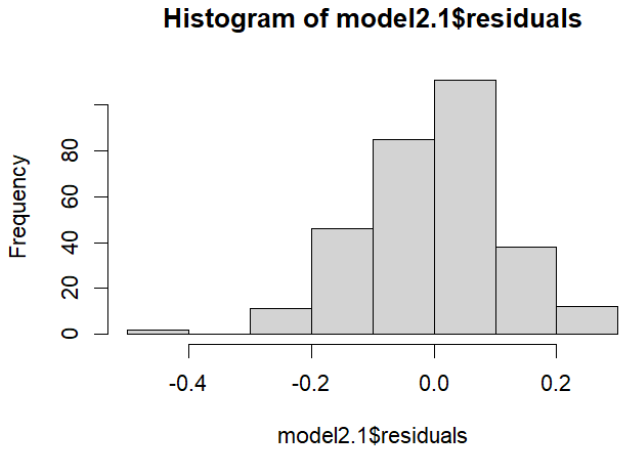
**Appendix Figure 12: Residuals vs. Fits Plot Regression Model 3**

```
hist(model1$residuals)
```



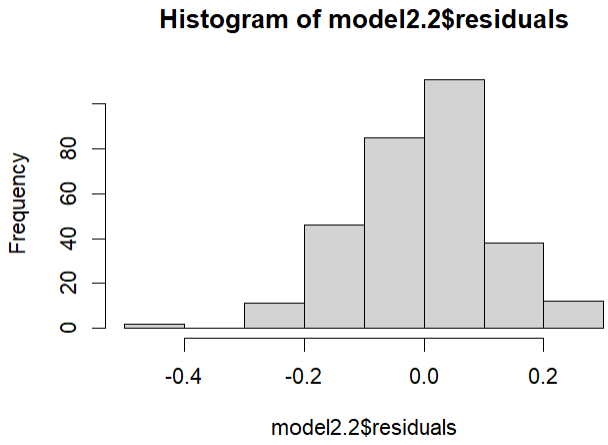

**Appendix Figure 13: Histogram of Residuals Regression Model 1**

```
hist(model2.1$residuals)
```



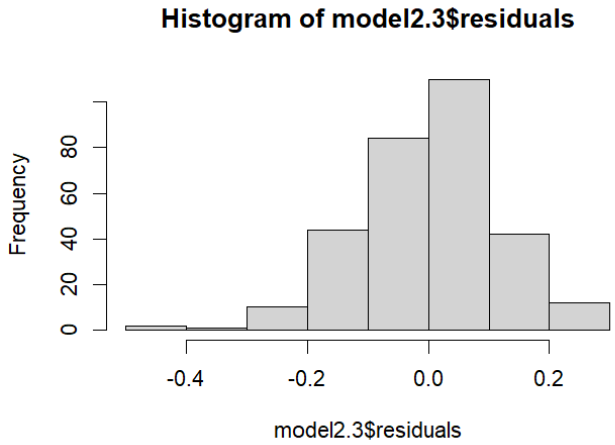

**Appendix Figure 14: Histogram of Residuals Regression Model 2.1**

```
hist(model2.2$residuals)
```



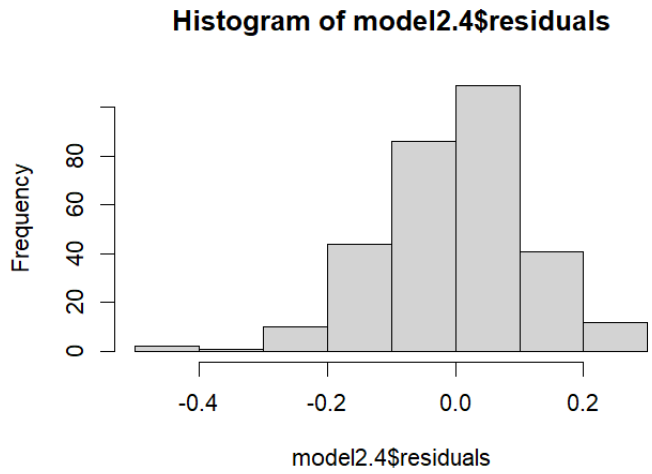

**Appendix Figure 15: Histogram of Residuals Regression Model 2.2**

```
hist(model2.3$residuals)
```



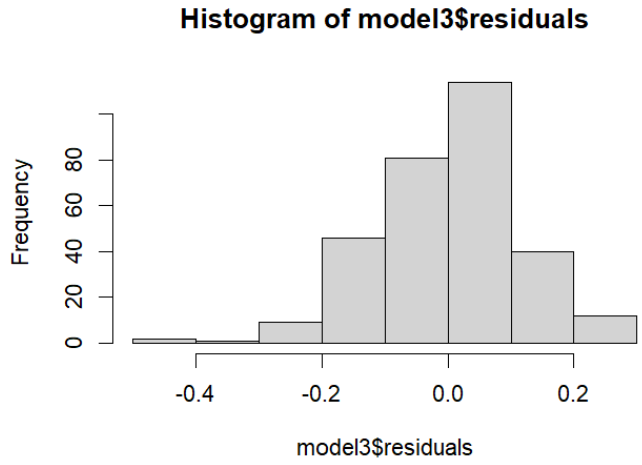

**Appendix Figure 16: Histogram of Residuals Regression Model 2.3**

```
hist(model2.4$residuals)
```




**Appendix Figure 17: Histogram of Residuals Regression Model 2.4**

```
hist(model3$residuals)
```




**Appendix Figure 18: Histogram of Residuals of Regression Model 3**

```
library(car)
vif_model1<-vif(model1)
vif_model1
        MBGend          SBGend          MBSize          SBSize
      1.196138        1.341821        1.628242        2.420038
     DebtRatio           LogTA             ROA      SBMeetings
      1.300647        2.926488        1.340538        1.239418
SBIndependence    CSRCommittee   SusCompIncen            Year
      1.312625        1.242278        1.219793        1.112322
   Industry_15     Industry_20     Industry_25     Industry_30
      7.787770       17.921491       13.012370        4.635177
   Industry_35     Industry_45     Industry_50     Industry_55
      9.078757       10.062083        7.431683        3.379342
   Industry_60
      7.093542
vif_model2.1<-vif(model2.1)
vif_model2.1
        Women0          SBGend          MBSize          SBSize
      1.515690        1.344016        1.797546        2.418245
     DebtRatio           LogTA             ROA      SBMeetings
      1.298118        2.938393        1.335164        1.238200
SBIndependence    CSRCommittee   SusCompIncen            Year
      1.311820        1.252729        1.212031        1.111571
   Industry_15     Industry_20     Industry_25     Industry_30
      7.802803       17.930491       13.041446        4.682046
   Industry_35     Industry_45     Industry_50     Industry_55
```

```
      9.075530      10.081815       7.426771       3.384127
   Industry_60
      7.121295
vif_model2.2<-vif(model2.2)
vif_model2.2
         Women1          SBGend          MBSize          SBSize
      1.515690        1.344016        1.797546        2.418245
     DebtRatio           LogTA             ROA      SBMeetings
      1.298118        2.938393        1.335164        1.238200
SBIndependence    CSRCommittee    SusCompIncen            Year
      1.311820        1.252729        1.212031        1.111571
   Industry_15     Industry_20     Industry_25     Industry_30
      7.802803       17.930491       13.041446        4.682046
   Industry_35     Industry_45     Industry_50     Industry_55
      9.075530       10.081815        7.426771        3.384127
   Industry_60
      7.121295
vif_model2.3<-vif(model2.3)
vif_model2.3
         Women2          SBGend          MBSize          SBSize
      1.384414        1.356736        1.799772        2.430140
     DebtRatio           LogTA             ROA      SBMeetings
      1.311198        2.947711        1.332893        1.239504
SBIndependence    CSRCommittee    SusCompIncen            Year
      1.303531        1.239853        1.197204        1.109125
   Industry_15     Industry_20     Industry_25     Industry_30
      7.743773       17.852868       12.904106        4.602098
   Industry_35     Industry_45     Industry_50     Industry_55
      9.093485       10.053851        7.459453        3.363916
   Industry_60
      7.059061
vif_model2.4<-vif(model2.4)
vif_model2.4
         Women3          SBGend          MBSize          SBSize
      1.173909        1.337788        1.649682        2.417965
     DebtRatio           LogTA             ROA      SBMeetings
      1.294975        2.936458        1.331324        1.239605
SBIndependence    CSRCommittee    SusCompIncen            Year
      1.299927        1.236236        1.183538        1.107611
   Industry_15     Industry_20     Industry_25     Industry_30
      7.754108       17.866052       12.887856        4.609348
   Industry_35     Industry_45     Industry_50     Industry_55
      9.073816       10.034335        7.427844        3.369842
   Industry_60
      7.068585
vif_model3<-vif(model3)
vif_model3
             CEO          SBGend          MBSize          SBSize
      1.076176        1.350730        1.613558        2.432167
     DebtRatio           LogTA             ROA      SBMeetings
      1.287581        2.929852        1.329745        1.238314
SBIndependence    CSRCommittee    SusCompIncen            Year
      1.299108        1.252251        1.188202        1.110863
   Industry_15     Industry_20     Industry_25     Industry_30
      7.746019       17.857745       12.879562        4.600279
   Industry_35     Industry_45     Industry_50     Industry_55
      9.060448       10.035832        7.418529        3.364128
   Industry_60
      7.073284
library(lmtest)
bptest(model1)

        studentized Breusch-Pagan test

data:  model1
BP = 58.163, df = 21, p-value = 2.413e-05

bptest(model2.1)

        studentized Breusch-Pagan test

data:  model2.1
```

```
BP = 59.376, df = 21, p-value = 1.587e-05
```

```
bptest(model2.2)
```

```
        studentized Breusch-Pagan test

data:  model2.2
BP = 59.376, df = 21, p-value = 1.587e-05
```

```
bptest(model2.3)
```

```
        studentized Breusch-Pagan test

data:  model2.3
BP = 52.781, df = 21, p-value = 0.0001478
```

```
bptest(model2.4)
```

```
        studentized Breusch-Pagan test

data:  model2.4
BP = 52.606, df = 21, p-value = 0.0001566
```

```
bptest(model3)
```

```
        studentized Breusch-Pagan test

data:  model3
BP = 52.689, df = 21, p-value = 0.0001523
```

**Robustness Tests**

```
robustness1<-lm(EnvSocMean ~ MBGend + SBGend + MBSize + SBSize + DebtR
atio + LogTA + ROA  + SBMeetings + SBIndependence + CSRCommittee + Sus
CompIncen + Year + Industry_15 + Industry_20 + Industry_25 + Industry_
30 + Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_
60, data=sample)
summary(robustness1)
```

```
Call:
lm(formula = EnvSocMean ~ MBGend + SBGend + MBSize + SBSize +
    DebtRatio + LogTA + ROA + SBMeetings + SBIndependence + CSRCommitt
ee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.60180 -0.08237  0.00057  0.09376  0.34676

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.3409933  0.1697678  -2.009 0.045531 *
MBGend          0.1069463  0.0642454   1.665 0.097089 .
SBGend          0.1586550  0.0707326   2.243 0.025669 *
MBSize          0.0066247  0.0067072   0.988 0.324143
SBSize          0.0069885  0.0023160   3.018 0.002780 **
DebtRatio      -0.0659941  0.0561729  -1.175 0.241047
LogTA           0.0387841  0.0081839   4.739 3.40e-06 ***
ROA             0.1502015  0.1485990   1.011 0.312983
SBMeetings      0.0002342  0.0018478   0.127 0.899225
SBIndependence  0.0802140  0.0264190   3.036 0.002619 **
CSRCommittee    0.1268488  0.0221906   5.716 2.76e-08 ***
SusCompIncen    0.0116939  0.0182298   0.641 0.521737
Year           -0.0252257  0.0172933  -1.459 0.145758
Industry_15    -0.1488138  0.0819311  -1.816 0.070378 .
Industry_20    -0.1872785  0.0774100  -2.419 0.016181 *
Industry_25    -0.2411688  0.0805362  -2.995 0.002992 **
```

```
Industry_30    -0.1553732  0.0843439  -1.842 0.066501 .
Industry_35    -0.1488077  0.0795248  -1.871 0.062348 .
Industry_45    -0.1494338  0.0778756  -1.919 0.056006 .
Industry_50    -0.2888505  0.0814752  -3.545 0.000459 ***
Industry_55    -0.3510060  0.0943026  -3.722 0.000238 ***
Industry_60    -0.1960754  0.0844030  -2.323 0.020883 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1432 on 283 degrees of freedom
Multiple R-squared:  0.5322,   Adjusted R-squared:  0.4974
F-statistic: 15.33 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
robustness2<-lm(ESG ~ MBWomen + SBWomen + MBSize + SBSize + DebtRatio +
LogTA + ROA  + SBMeetings + SBIndependence + CSRCommittee + SusCompInc
en + Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + In
dustry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, dat
a=sample)
summary(robustness2)
```

```
Call:
lm(formula = ESG ~ MBWomen + SBWomen + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.49254 -0.07481  0.01081  0.07208  0.27111

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.3485038  0.1455096  -2.395  0.01727 *
MBWomen         0.0245865  0.0145330   1.692  0.09179 .
SBWomen         0.0118751  0.0064198   1.850  0.06539 .
MBSize          0.0013296  0.0061284   0.217  0.82839
SBSize         -0.0006712  0.0029769  -0.225  0.82178
DebtRatio      -0.0471128  0.0473549  -0.995  0.32064
LogTA           0.0393239  0.0069065   5.694 3.11e-08 ***
ROA             0.1011814  0.1241223   0.815  0.41566
SBMeetings      0.0006362  0.0015393   0.413  0.67971
SBIndependence  0.1256721  0.0221919   5.663 3.65e-08 ***
CSRCommittee    0.1096344  0.0186130   5.890 1.09e-08 ***
SusCompIncen    0.0300779  0.0152926   1.967  0.05018 .
Year           -0.0241355  0.0144779  -1.667  0.09661 .
Industry_15    -0.0699645  0.0685815  -1.020  0.30852
Industry_20    -0.1036306  0.0648562  -1.598  0.11119
Industry_25    -0.1424415  0.0673847  -2.114  0.03540 *
Industry_30    -0.0746046  0.0707626  -1.054  0.29265
Industry_35    -0.0634297  0.0666107  -0.952  0.34179
Industry_45    -0.0340802  0.0653586  -0.521  0.60247
Industry_50    -0.1841644  0.0684139  -2.692  0.00753 **
Industry_55    -0.2614541  0.0791190  -3.305  0.00107 **
Industry_60    -0.1545246  0.0707712  -2.183  0.02982 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.12 on 283 degrees of freedom
Multiple R-squared:  0.5672,   Adjusted R-squared:  0.5351
F-statistic: 17.66 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
robustness3.1<-lm(ESG ~ MBGend + SBGend, data=sample)
summary(robustness3.1)
```

```
Call:
lm(formula = ESG ~ MBGend + SBGend, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.40433 -0.11048  0.02921  0.11942  0.28419
```

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  0.46995    0.02310  20.343  < 2e-16 ***
MBGend       0.25405    0.06698   3.793  0.00018 ***
SBGend       0.41633    0.06962   5.980 6.29e-09 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1632 on 302 degrees of freedom
Multiple R-squared:  0.1461,   Adjusted R-squared:  0.1405
F-statistic: 25.84 on 2 and 302 DF,  p-value: 4.359e-11
```

```
robustness3.2<-lm(ESG ~ MBGend + SBGend + MBSize + SBSize + DebtRatio +
LogMarketCap + ROA  + SBMeetings + SBIndependence + CSRCommittee + Sus
CompIncen + Year + Industry_15 + Industry_20 + Industry_25 + Industry_
30 + Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_
60, data=sample)
summary(robustness3.2)
```

```
Call:
lm(formula = ESG ~ MBGend + SBGend + MBSize + SBSize + DebtRatio +
    LogMarketCap + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.41312 -0.07175  0.01374  0.07173  0.28225

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4224694  0.1326922  -3.184  0.00162 **
MBGend          0.1256555  0.0525610   2.391  0.01747 *
SBGend          0.1889063  0.0578960   3.263  0.00124 **
MBSize          0.0054172  0.0054455   0.995  0.32068
SBSize          0.0049999  0.0017002   2.941  0.00354 **
DebtRatio      -0.0002691  0.0455727  -0.006  0.99529
LogMarketCap    0.0396671  0.0062046   6.393 6.68e-10 ***
ROA            -0.0634857  0.1241514  -0.511  0.60950
SBMeetings      0.0008296  0.0015149   0.548  0.58440
SBIndependence  0.1100761  0.0220205   4.999 1.01e-06 ***
CSRCommittee    0.1111334  0.0180688   6.151 2.62e-09 ***
SusCompIncen    0.0232790  0.0150682   1.545  0.12349
Year           -0.0217087  0.0141819  -1.531  0.12695
Industry_15    -0.0836308  0.0671462  -1.246  0.21398
Industry_20    -0.1205021  0.0633658  -1.902  0.05823 .
Industry_25    -0.1648993  0.0659743  -2.499  0.01301 *
Industry_30    -0.1179652  0.0691461  -1.706  0.08910 .
Industry_35    -0.1034516  0.0653447  -1.583  0.11450
Industry_45    -0.0713536  0.0636149  -1.122  0.26296
Industry_50    -0.2024168  0.0668035  -3.030  0.00267 **
Industry_55    -0.2553378  0.0771189  -3.311  0.00105 **
Industry_60    -0.1373255  0.0691136  -1.987  0.04789 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1173 on 283 degrees of freedom
Multiple R-squared:  0.5861,   Adjusted R-squared:  0.5554
F-statistic: 19.08 on 21 and 283 DF,  p-value: < 2.2e-16
```

```
robustness3.3<-lm(ESG ~ MBGend + MBSize +  DebtRatio + LogTA + ROA + S
usCompIncen + Year + Industry_15 + Industry_20 + Industry_25 + Industr
y_30 + Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industr
y_60, data=sample)
summary(robustness3.3)
```

```
Call:
lm(formula = ESG ~ MBGend + MBSize + DebtRatio + LogTA + ROA +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
```

```
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.59309 -0.07176  0.00789  0.08120  0.32224

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)  -0.765074   0.138819  -5.511 7.91e-08 ***
MBGend        0.088975   0.060749   1.465   0.1441
MBSize        0.003699   0.006305   0.587   0.5579
DebtRatio    -0.016434   0.053529  -0.307   0.7591
LogTA         0.060437   0.006370   9.488  < 2e-16 ***
ROA           0.141497   0.137502   1.029   0.3043
SusCompIncen  0.033638   0.017376   1.936   0.0539 .
Year         -0.016148   0.016377  -0.986   0.3249
Industry_15   0.057719   0.076015   0.759   0.4483
Industry_20   0.012771   0.072061   0.177   0.8595
Industry_25  -0.016822   0.074860  -0.225   0.8224
Industry_30   0.026176   0.079338   0.330   0.7417
Industry_35   0.054454   0.074370   0.732   0.4646
Industry_45   0.077359   0.072949   1.060   0.2898
Industry_50  -0.075658   0.076557  -0.988   0.3239
Industry_55  -0.155640   0.088312  -1.762   0.0791 .
Industry_60  -0.017386   0.077854  -0.223   0.8235
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1368 on 288 degrees of freedom
Multiple R-squared:  0.4274,   Adjusted R-squared:  0.3955
F-statistic: 13.43 on 16 and 288 DF,  p-value: < 2.2e-16
```

**Interaction Effects**

```
interaction1<-lm(ESG ~ MBGend*SBGend + MBSize + SBSize + DebtRatio + L
ogTA + ROA + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction1)

Call:
lm(formula = ESG ~ MBGend * SBGend + MBSize + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47569 -0.07358  0.00654  0.07354  0.26438

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4264572  0.1435045  -2.972 0.003217 **
MBGend          0.1702869  0.1078379   1.579 0.115434
SBGend          0.2003421  0.0674228   2.971 0.003220 **
MBSize          0.0050511  0.0055814   0.905 0.366245
SBSize          0.0022880  0.0019204   1.191 0.234498
DebtRatio      -0.0463086  0.0465754  -0.994 0.320943
LogTA           0.0403324  0.0068843   5.859 1.30e-08 ***
ROA             0.1234112  0.1232986   1.001 0.317727
SBMeetings      0.0009688  0.0015334   0.632 0.528028
SBIndependence  0.1232430  0.0219129   5.624 4.48e-08 ***
CSRCommittee    0.1068483  0.0183987   5.807 1.71e-08 ***
SusCompIncen    0.0284648  0.0151271   1.882 0.060905 .
Year           -0.0261719  0.0143403  -1.825 0.069050 .
```

```
Industry_15    -0.0815271  0.0679887  -1.199 0.231485
Industry_20    -0.1100088  0.0643352  -1.710 0.088379 .
Industry_25    -0.1556755  0.0668259  -2.330 0.020535 *
Industry_30    -0.0828216  0.0699999  -1.183 0.237739
Industry_35    -0.0754023  0.0664955  -1.134 0.257781
Industry_45    -0.0354786  0.0646304  -0.549 0.583477
Industry_50    -0.1865253  0.0676592  -2.757 0.006217 **
Industry_55    -0.2662250  0.0783386  -3.398 0.000776 ***
Industry_60    -0.1578765  0.0704374  -2.241 0.025780 *
MBGend:SBGend  -0.2069193  0.3422874  -0.605 0.545985
---
Signif. codes:
0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5779,   Adjusted R-squared:  0.545
F-statistic: 17.55 on 22 and 282 DF,  p-value: < 2.2e-16

interaction2<-lm(ESG ~ MBGend*MBSize + SBGend + SBSize + DebtRatio + L
ogTA + ROA + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction2)

Call:
lm(formula = ESG ~ MBGend * MBSize + SBGend + SBSize + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47534 -0.07126  0.00977  0.07311  0.26577

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4023588  0.1476675  -2.725 0.006837 **
MBGend          0.0934401  0.1351298   0.691 0.489830
MBSize          0.0045395  0.0074318   0.611 0.541815
SBGend          0.1813621  0.0590913   3.069 0.002355 **
SBSize          0.0023124  0.0019219   1.203 0.229894
DebtRatio      -0.0471478  0.0470534  -1.002 0.317199
LogTA           0.0394205  0.0069106   5.704 2.95e-08 ***
ROA             0.1206333  0.1232820   0.979 0.328658
SBMeetings      0.0009546  0.0015404   0.620 0.535938
SBIndependence  0.1236750  0.0219213   5.642 4.09e-08 ***
CSRCommittee    0.1067846  0.0184124   5.800 1.78e-08 ***
SusCompIncen    0.0287294  0.0151378   1.898 0.058736 .
Year           -0.0260786  0.0143508  -1.817 0.070244 .
Industry_15    -0.0799560  0.0679760  -1.176 0.240491
Industry_20    -0.1072587  0.0642220  -1.670 0.096005 .
Industry_25    -0.1544476  0.0668516  -2.310 0.021593 *
Industry_30    -0.0814273  0.0700359  -1.163 0.245954
Industry_35    -0.0704374  0.0659919  -1.067 0.286720
Industry_45    -0.0344353  0.0647391  -0.532 0.595207
Industry_50    -0.1851315  0.0678206  -2.730 0.006738 **
Industry_55    -0.2631200  0.0782421  -3.363 0.000878 ***
Industry_60    -0.1532667  0.0700370  -2.188 0.029463 *
MBGend:MBSize   0.0059541  0.0366653   0.162 0.871114
---
Signif. codes:
0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1188 on 282 degrees of freedom
Multiple R-squared:  0.5774,   Adjusted R-squared:  0.5445
F-statistic: 17.51 on 22 and 282 DF,  p-value: < 2.2e-16

interaction3<-lm(ESG ~ MBGend*SBSize + MBSize + SBGend + DebtRatio + L
ogTA + ROA + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen
```

```
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction3)

Call:
lm(formula = ESG ~ MBGend * SBSize + MBSize + SBGend + DebtRatio +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.48099 -0.07363  0.00885  0.07167  0.26723

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.446318   0.143686  -3.106  0.00209 **
MBGend          0.225093   0.105869   2.126  0.03436 *
SBSize          0.003654   0.002214   1.651  0.09987 .
MBSize          0.005349   0.005550   0.964  0.33595
SBGend          0.181404   0.058538   3.099  0.00214 **
DebtRatio      -0.049619   0.046572  -1.065  0.28760
LogTA           0.041097   0.006878   5.975 6.93e-09 ***
ROA             0.116845   0.123000   0.950  0.34295
SBMeetings      0.001072   0.001533   0.699  0.48519
SBIndependence  0.126125   0.021959   5.744 2.40e-08 ***
CSRCommittee    0.108406   0.018408   5.889 1.10e-08 ***
SusCompIncen    0.027424   0.015129   1.813  0.07096 .
Year           -0.025248   0.014324  -1.763  0.07904 .
Industry_15    -0.092173   0.068550  -1.345  0.17983
Industry_20    -0.118710   0.064734  -1.834  0.06774 .
Industry_25    -0.163849   0.067123  -2.441  0.01526 *
Industry_30    -0.091171   0.070296  -1.297  0.19571
Industry_35    -0.083785   0.066745  -1.255  0.21041
Industry_45    -0.041591   0.064760  -0.642  0.52125
Industry_50    -0.191200   0.067662  -2.826  0.00505 **
Industry_55    -0.273016   0.078441  -3.481  0.00058 ***
Industry_60    -0.165487   0.070587  -2.344  0.01975 *
MBGend:SBSize  -0.011526   0.009465  -1.218  0.22434
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1185 on 282 degrees of freedom
Multiple R-squared:  0.5796,   Adjusted R-squared:  0.5468
F-statistic: 17.67 on 22 and 282 DF,  p-value: < 2.2e-16

interaction4<-lm(ESG ~ MBGend*DebtRatio + SBSize + MBSize + SBGend + L
ogTA + ROA + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction4)

Call:
lm(formula = ESG ~ MBGend * DebtRatio + SBSize + MBSize + SBGend +
    LogTA + ROA + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.48097 -0.07123  0.00632  0.07122  0.26857

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)     -0.3985479  0.1409441  -2.828  0.00502 **
```

```
MBGend             0.0249064  0.0986914   0.252  0.80094
DebtRatio         -0.0767009  0.0546457  -1.404  0.16154
SBSize             0.0022889  0.0019176   1.194  0.23364
MBSize             0.0048312  0.0055738   0.867  0.38681
SBGend             0.1806965  0.0585672   3.085  0.00224 **
LogTA              0.0393303  0.0067820   5.799 1.78e-08 ***
ROA                0.1013077  0.1243492   0.815  0.41593
SBMeetings         0.0009337  0.0015299   0.610  0.54217
SBIndependence     0.1253465  0.0219350   5.714 2.80e-08 ***
CSRCommittee       0.1083204  0.0184262   5.879 1.17e-08 ***
SusCompIncen       0.0272359  0.0151683   1.796  0.07363 .
Year              -0.0253358  0.0143332  -1.768  0.07820 .
Industry_15       -0.0729625  0.0681423  -1.071  0.28520
Industry_20       -0.1027393  0.0642385  -1.599  0.11086
Industry_25       -0.1511383  0.0667400  -2.265  0.02430 *
Industry_30       -0.0744704  0.0700987  -1.062  0.28898
Industry_35       -0.0678245  0.0658829  -1.029  0.30414
Industry_45       -0.0306988  0.0645439  -0.476  0.63471
Industry_50       -0.1816089  0.0675051  -2.690  0.00756 **
Industry_55       -0.2526286  0.0787180  -3.209  0.00148 **
Industry_60       -0.1516449  0.0698966  -2.170  0.03088 *
MBGend:DebtRatio   0.3242890  0.3039245   1.067  0.28688
---
Signif. codes:
0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1186 on 282 degrees of freedom
Multiple R-squared:  0.5791,   Adjusted R-squared:  0.5462
F-statistic: 17.63 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction5<-lm(ESG ~ MBGend*LogTA + DebtRatio + ROA + SBSize + MBSiz
e + SBGend + SBMeetings + SBIndependence + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction5)
```

```
Call:
lm(formula = ESG ~ MBGend * LogTA + DebtRatio + ROA + SBSize +
    MBSize + SBGend + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47246 -0.06927  0.00813  0.07405  0.26611

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.3707847  0.1646751  -2.252  0.02512 *
MBGend         -0.1932856  0.6779540  -0.285  0.77578
LogTA           0.0378292  0.0078606   4.812 2.43e-06 ***
DebtRatio      -0.0460471  0.0465873  -0.988  0.32380
ROA             0.1191953  0.1232758   0.967  0.33442
SBSize          0.0021862  0.0019386   1.128  0.26041
MBSize          0.0050412  0.0056012   0.900  0.36888
SBGend          0.1786979  0.0587596   3.041  0.00258 **
SBMeetings      0.0009339  0.0015325   0.609  0.54275
SBIndependence  0.1226611  0.0220101   5.573 5.85e-08 ***
CSRCommittee    0.1074341  0.0184510   5.823 1.57e-08 ***
SusCompIncen    0.0290565  0.0151268   1.921  0.05576 .
Year           -0.0262758  0.0143530  -1.831  0.06820 .
Industry_15    -0.0766061  0.0683193  -1.121  0.26312
Industry_20    -0.1039408  0.0646318  -1.608  0.10891
Industry_25    -0.1504969  0.0672586  -2.238  0.02603 *
Industry_30    -0.0771767  0.0704416  -1.096  0.27418
Industry_35    -0.0669831  0.0663326  -1.010  0.31345
Industry_45    -0.0318729  0.0647205  -0.492  0.62277
Industry_50    -0.1822301  0.0677151  -2.691  0.00755 **
Industry_55    -0.2607350  0.0784124  -3.325  0.00100 **
```

```
Industry_60    -0.1508783  0.0701604  -2.150  0.03237 *
MBGend:LogTA    0.0139997  0.0308311   0.454  0.65012
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5777,   Adjusted R-squared:  0.5447
F-statistic: 17.53 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction6<-lm(ESG ~ MBGend*ROA + LogTA + DebtRatio + ROA + SBSize +
MBSize + SBGend + SBMeetings + SBIndependence + CSRCommittee + SusComp
Incen + Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, d
ata=sample)
summary(interaction6)
```

```
Call:
lm(formula = ESG ~ MBGend * ROA + LogTA + DebtRatio + ROA + SBSize +
    MBSize + SBGend + SBMeetings + SBIndependence + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47574 -0.06898  0.00745  0.07099  0.26290

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4166890  0.1407080  -2.961  0.00332 **
MBGend          0.1458425  0.0609095   2.394  0.01730 *
ROA             0.1786545  0.1341630   1.332  0.18406
LogTA           0.0396468  0.0067757   5.851 1.35e-08 ***
DebtRatio      -0.0415485  0.0466947  -0.890  0.37434
SBSize          0.0020616  0.0019305   1.068  0.28648
MBSize          0.0056604  0.0055609   1.018  0.30960
SBGend          0.1778484  0.0586024   3.035  0.00263 **
SBMeetings      0.0008457  0.0015318   0.552  0.58132
SBIndependence  0.1245826  0.0218913   5.691 3.16e-08 ***
CSRCommittee    0.1064874  0.0183750   5.795 1.82e-08 ***
SusCompIncen    0.0287309  0.0150932   1.904  0.05799 .
Year           -0.0250588  0.0143451  -1.747  0.08175 .
Industry_15    -0.0730752  0.0681171  -1.073  0.28428
Industry_20    -0.1012819  0.0643309  -1.574  0.11652
Industry_25    -0.1489562  0.0668449  -2.228  0.02664 *
Industry_30    -0.0779804  0.0698838  -1.116  0.26543
Industry_35    -0.0628068  0.0661911  -0.949  0.34350
Industry_45    -0.0293439  0.0646035  -0.454  0.65002
Industry_50    -0.1774528  0.0677433  -2.619  0.00928 **
Industry_55    -0.2585195  0.0781990  -3.306  0.00107 **
Industry_60    -0.1463712  0.0701479  -2.087  0.03782 *
MBGend:ROA     -0.9770183  0.8994309  -1.086  0.27829
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1185 on 282 degrees of freedom
Multiple R-squared:  0.5791,   Adjusted R-squared:  0.5463
F-statistic: 17.64 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction7<-lm(ESG ~ MBGend*SBMeetings + LogTA + ROA + DebtRatio + S
BSize + MBSize + SBGend + SBIndependence + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction7)
```

```
Call:
lm(formula = ESG ~ MBGend * SBMeetings + LogTA + ROA + DebtRatio +
    SBSize + MBSize + SBGend + SBIndependence + CSRCommittee +
```

```
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47740 -0.06932  0.00732  0.07540  0.26432

Coefficients:
                   Estimate Std. Error t value Pr(>|t|)
(Intercept)       -0.413726   0.140842  -2.938  0.00358 **
MBGend             0.046396   0.108172   0.429  0.66832
SBMeetings         0.000209   0.001835   0.114  0.90941
LogTA              0.039984   0.006802   5.878 1.17e-08 ***
ROA                0.115052   0.123413   0.932  0.35201
DebtRatio         -0.045750   0.046565  -0.983  0.32669
SBSize             0.002095   0.001942   1.078  0.28179
MBSize             0.005807   0.005598   1.037  0.30045
SBGend             0.179253   0.058647   3.056  0.00245 **
SBIndependence     0.121681   0.022065   5.515 7.90e-08 ***
CSRCommittee       0.105729   0.018459   5.728 2.61e-08 ***
SusCompIncen       0.029397   0.015131   1.943  0.05304 .
Year              -0.025143   0.014388  -1.748  0.08163 .
Industry_15       -0.074283   0.068356  -1.087  0.27809
Industry_20       -0.103167   0.064430  -1.601  0.11044
Industry_25       -0.149262   0.067098  -2.225  0.02690 *
Industry_30       -0.076733   0.070162  -1.094  0.27504
Industry_35       -0.065130   0.066300  -0.982  0.32677
Industry_45       -0.030257   0.064738  -0.467  0.64059
Industry_50       -0.182046   0.067605  -2.693  0.00751 **
Industry_55       -0.258273   0.078484  -3.291  0.00113 **
Industry_60       -0.146669   0.070528  -2.080  0.03847 *
MBGend:SBMeetings  0.007472   0.010468   0.714  0.47593
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5781,   Adjusted R-squared:  0.5452
F-statistic: 17.57 on 22 and 282 DF,  p-value: < 2.2e-16

interaction8<-lm(ESG ~ MBGend*SBIndependence + SBMeetings + LogTA + RO
A + DebtRatio + SBSize + MBSize + SBGend + CSRCommittee + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction8)

Call:
lm(formula = ESG ~ MBGend * SBIndependence + SBMeetings + LogTA +
    ROA + DebtRatio + SBSize + MBSize + SBGend + CSRCommittee +
    SusCompIncen + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47381 -0.07094  0.00955  0.07019  0.26249

Coefficients:
                       Estimate Std. Error t value Pr(>|t|)
(Intercept)          -0.4156654  0.1411346  -2.945 0.003497 **
MBGend                0.1567110  0.0900020   1.741 0.082740 .
SBIndependence        0.1315338  0.0256450   5.129 5.42e-07 ***
SBMeetings            0.0009888  0.0015352   0.644 0.520066
LogTA                 0.0398775  0.0067984   5.866 1.25e-08 ***
ROA                   0.1281984  0.1238837   1.035 0.301636
DebtRatio            -0.0480928  0.0466966  -1.030 0.303940
SBSize                0.0024062  0.0019277   1.248 0.212988
MBSize                0.0053085  0.0055614   0.955 0.340639
```

```
SBGend                  0.1785945  0.0587118   3.042 0.002572 **
CSRCommittee            0.1066264  0.0184024   5.794 1.83e-08 ***
SusCompIncen            0.0291217  0.0151227   1.926 0.055148 .
Year                   -0.0260397  0.0143386  -1.816 0.070423 .
Industry_15            -0.0833340  0.0681878  -1.222 0.222681
Industry_20            -0.1111754  0.0645095  -1.723 0.085913 .
Industry_25            -0.1581639  0.0671275  -2.356 0.019149 *
Industry_30            -0.0866847  0.0705964  -1.228 0.220512
Industry_35            -0.0752320  0.0664794  -1.132 0.258739
Industry_45            -0.0386180  0.0650843  -0.593 0.553420
Industry_50            -0.1876547  0.0677995  -2.768 0.006017 **
Industry_55            -0.2674114  0.0784967  -3.407 0.000753 ***
Industry_60            -0.1552332  0.0700796  -2.215 0.027552 *
MBGend:SBIndependence -0.0861632  0.1450091  -0.594 0.552860
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5779,   Adjusted R-squared:  0.545
F-statistic: 17.55 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction9<-lm(ESG ~ MBGend*CSRCommittee + SBIndependence + SBMeetin
gs + LogTA + ROA + DebtRatio + SBSize + MBSize + SBGend + SusCompIncen
+ Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction9)
```

```
Call:
lm(formula = ESG ~ MBGend * CSRCommittee + SBIndependence + SBMeetings
+
    LogTA + ROA + DebtRatio + SBSize + MBSize + SBGend + SusCompIncen +
    Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
    Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_6
0,
    data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47602 -0.07215  0.00885  0.07147  0.26338

Coefficients:
                      Estimate Std. Error t value Pr(>|t|)
(Intercept)         -0.408398   0.140853  -2.899 0.004032 **
MBGend               0.150309   0.114789   1.309 0.191451
CSRCommittee         0.109903   0.020273   5.421 1.27e-07 ***
SBIndependence       0.124461   0.022040   5.647 3.98e-08 ***
SBMeetings           0.001008   0.001548   0.651 0.515454
LogTA                0.039471   0.006802   5.803 1.75e-08 ***
ROA                  0.122620   0.123394   0.994 0.321206
DebtRatio           -0.048243   0.046973  -1.027 0.305282
SBSize               0.002474   0.001977   1.251 0.211825
MBSize               0.005317   0.005564   0.956 0.340094
SBGend               0.181479   0.058772   3.088 0.002217 **
SusCompIncen         0.028684   0.015127   1.896 0.058947 .
Year                -0.026121   0.014347  -1.821 0.069715 .
Industry_15         -0.083122   0.068568  -1.212 0.226434
Industry_20         -0.109295   0.064440  -1.696 0.090975 .
Industry_25         -0.156630   0.067173  -2.332 0.020419 *
Industry_30         -0.083099   0.070214  -1.184 0.237602
Industry_35         -0.073225   0.066494  -1.101 0.271741
Industry_45         -0.036321   0.064982  -0.559 0.576647
Industry_50         -0.185279   0.067643  -2.739 0.006554 **
Industry_55         -0.265355   0.078429  -3.383 0.000817 ***
Industry_60         -0.154205   0.070085  -2.200 0.028599 *
MBGend:CSRCommittee -0.046628   0.129160  -0.361 0.718362
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 282 degrees of freedom
Multiple R-squared:  0.5776,   Adjusted R-squared:  0.5446
F-statistic: 17.53 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction10<-lm(ESG ~ MBGend*SusCompIncen + CSRCommittee + SBIndepen
dence + SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize + SBGen
d + Year + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Ind
ustry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data
=sample)
summary(interaction10)

Call:
lm(formula = ESG ~ MBGend * SusCompIncen + CSRCommittee + SBIndependen
ce +
    SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize +
    SBGend + Year + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47681 -0.07067  0.00804  0.07354  0.26627

Coefficients:
                     Estimate Std. Error t value Pr(>|t|)
(Intercept)        -0.4096629  0.1408333  -2.909 0.003916 **
MBGend              0.1000071  0.0756645   1.322 0.187334
SusCompIncen        0.0260831  0.0186238   1.401 0.162456
CSRCommittee        0.1070190  0.0184228   5.809 1.69e-08 ***
SBIndependence      0.1233915  0.0219332   5.626 4.45e-08 ***
SBMeetings          0.0009487  0.0015346   0.618 0.536945
LogTA               0.0396347  0.0067891   5.838 1.45e-08 ***
ROA                 0.1201176  0.1232826   0.974 0.330729
DebtRatio          -0.0471713  0.0467935  -1.008 0.314283
SBSize              0.0023083  0.0019213   1.201 0.230581
MBSize              0.0053006  0.0055661   0.952 0.341761
SBGend              0.1804326  0.0586823   3.075 0.002313 **
Year               -0.0258903  0.0143556  -1.803 0.072378 .
Industry_15        -0.0783978  0.0682013  -1.150 0.251321
Industry_20        -0.1059896  0.0644333  -1.645 0.101094
Industry_25        -0.1531609  0.0669093  -2.289 0.022814 *
Industry_30        -0.0795641  0.0701809  -1.134 0.257883
Industry_35        -0.0692536  0.0660757  -1.048 0.295492
Industry_45        -0.0327618  0.0647238  -0.506 0.613127
Industry_50        -0.1834178  0.0676649  -2.711 0.007126 **
Industry_55        -0.2625285  0.0782877  -3.353 0.000908 ***
Industry_60        -0.1518393  0.0701759  -2.164 0.031328 *
MBGend:SusCompIncen  0.0259714  0.1025835   0.253 0.800319
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 282 degrees of freedom
Multiple R-squared:  0.5775,   Adjusted R-squared:  0.5445
F-statistic: 17.52 on 22 and 282 DF,  p-value: < 2.2e-16

interaction11<-lm(ESG ~ MBGend*Year + SusCompIncen + CSRCommittee + SB
Independence + SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize +
SBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction11)

Call:
lm(formula = ESG ~ MBGend * Year + SusCompIncen + CSRCommittee +
    SBIndependence + SBMeetings + LogTA + ROA + DebtRatio + SBSize +
    MBSize + SBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47607 -0.07138  0.00834  0.07397  0.26475
```

```
Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4088864  0.1410782  -2.898 0.004047 **
MBGend          0.1087128  0.0789160   1.378 0.169426
Year           -0.0268838  0.0176191  -1.526 0.128172
SusCompIncen    0.0288919  0.0151394   1.908 0.057356 .
CSRCommittee    0.1069314  0.0184458   5.797 1.80e-08 ***
SBIndependence  0.1235444  0.0219323   5.633 4.28e-08 ***
SBMeetings      0.0009366  0.0015350   0.610 0.542229
LogTA           0.0396091  0.0067941   5.830 1.51e-08 ***
ROA             0.1207059  0.1233031   0.979 0.328450
DebtRatio      -0.0460882  0.0466036  -0.989 0.323540
SBSize          0.0023044  0.0019215   1.199 0.231419
MBSize          0.0053578  0.0055688   0.962 0.336822
SBGend          0.1803821  0.0587097   3.072 0.002331 **
Industry_15    -0.0798607  0.0679748  -1.175 0.241043
Industry_20    -0.1073758  0.0642255  -1.672 0.095662 .
Industry_25    -0.1540630  0.0668170  -2.306 0.021850 *
Industry_30    -0.0809696  0.0699761  -1.157 0.248209
Industry_35    -0.0702236  0.0659782  -1.064 0.288083
Industry_45    -0.0338157  0.0646121  -0.523 0.601131
Industry_50    -0.1841685  0.0675995  -2.724 0.006844 **
Industry_55    -0.2634168  0.0782521  -3.366 0.000868 ***
Industry_60    -0.1530015  0.0700255  -2.185 0.029716 *
MBGend:Year     0.0084014  0.0999394   0.084 0.933065
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 282 degrees of freedom
Multiple R-squared:  0.5774,   Adjusted R-squared:  0.5444
F-statistic: 17.51 on 22 and 282 DF,  p-value: < 2.2e-16

interaction12<-lm(ESG ~ SBGend*MBSize + Year + SusCompIncen + CSRCommi
ttee + SBIndependence + SBMeetings + LogTA + ROA + DebtRatio + SBSize +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction12)

Call:
lm(formula = ESG ~ SBGend * MBSize + Year + SusCompIncen + CSRCommitte
e +
    SBIndependence + SBMeetings + LogTA + ROA + DebtRatio + SBSize +
    MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
    Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_6
0,
    data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.46917 -0.07285  0.00980  0.06900  0.27191

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.465013   0.147734  -3.148 0.001822 **
SBGend          0.358715   0.158368   2.265 0.024267 *
MBSize          0.020189   0.013442   1.502 0.134244
Year           -0.025905   0.014311  -1.810 0.071333 .
SusCompIncen    0.027990   0.015101   1.853 0.064859 .
CSRCommittee    0.107159   0.018365   5.835 1.47e-08 ***
SBIndependence  0.124577   0.021876   5.695 3.10e-08 ***
SBMeetings      0.001050   0.001532   0.686 0.493584
LogTA           0.039789   0.006773   5.874 1.19e-08 ***
ROA             0.139235   0.123929   1.124 0.262180
DebtRatio      -0.045281   0.046488  -0.974 0.330868
SBSize          0.002476   0.001922   1.289 0.198567
MBGend          0.112799   0.053167   2.122 0.034744 *
Industry_15    -0.084696   0.067917  -1.247 0.213409
Industry_20    -0.112197   0.064183  -1.748 0.081535 .
Industry_25    -0.161125   0.066896  -2.409 0.016656 *
Industry_30    -0.084595   0.069859  -1.211 0.226935
```

```
Industry_35    -0.076294   0.065999  -1.156 0.248660
Industry_45    -0.037155   0.064503  -0.576 0.565065
Industry_50    -0.187557   0.067477  -2.780 0.005809 **
Industry_55    -0.266402   0.078078  -3.412 0.000739 ***
Industry_60    -0.161444   0.070187  -2.300 0.022167 *
SBGend:MBSize  -0.048707   0.040158  -1.213 0.226187
---
Signif. codes:
0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1185 on 282 degrees of freedom
Multiple R-squared:  0.5796,   Adjusted R-squared:  0.5468
F-statistic: 17.67 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction13<-lm(ESG ~ SBGend*SBSize + MBSize + Year + SusCompIncen +
CSRCommittee + SBIndependence + SBMeetings + LogTA + ROA + DebtRatio +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction13)
```

```
Call:
lm(formula = ESG ~ SBGend * SBSize + MBSize + Year + SusCompIncen +
    CSRCommittee + SBIndependence + SBMeetings + LogTA + ROA +
    DebtRatio + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.48206 -0.07141  0.01120  0.07347  0.27272

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.453908   0.143464  -3.164 0.001727 **
SBGend          0.316693   0.109130   2.902 0.004001 **
SBSize          0.007657   0.004090   1.872 0.062197 .
MBSize          0.005819   0.005553   1.048 0.295542
Year           -0.026612   0.014298  -1.861 0.063747 .
SusCompIncen    0.029680   0.015077   1.969 0.049980 *
CSRCommittee    0.103972   0.018441   5.638 4.17e-08 ***
SBIndependence  0.125675   0.021878   5.744 2.39e-08 ***
SBMeetings      0.001145   0.001534   0.746 0.456117
LogTA           0.039890   0.006766   5.896 1.06e-08 ***
ROA             0.124016   0.122832   1.010 0.313535
DebtRatio      -0.046173   0.046424  -0.995 0.320788
MBGend          0.124589   0.053611   2.324 0.020840 *
Industry_15    -0.085537   0.067822  -1.261 0.208276
Industry_20    -0.110435   0.064010  -1.725 0.085573 .
Industry_25    -0.159814   0.066671  -2.397 0.017179 *
Industry_30    -0.077962   0.069735  -1.118 0.264527
Industry_35    -0.073270   0.065756  -1.114 0.266114
Industry_45    -0.032509   0.064366  -0.505 0.613903
Industry_50    -0.186480   0.067352  -2.769 0.006000 **
Industry_55    -0.271039   0.078112  -3.470 0.000602 ***
Industry_60    -0.154947   0.069767  -2.221 0.027150 *
SBGend:SBSize  -0.017548   0.011850  -1.481 0.139777
---
Signif. codes:
0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.1183 on 282 degrees of freedom
Multiple R-squared:  0.5806,   Adjusted R-squared:  0.5479
F-statistic: 17.75 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction14<-lm(ESG ~ SBGend*DebtRatio + SBSize + MBSize + Year + Su
sCompIncen + CSRCommittee + SBIndependence + SBMeetings + LogTA + ROA +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction14)
```

```
Call:
lm(formula = ESG ~ SBGend * DebtRatio + SBSize + MBSize + Year +
    SusCompIncen + CSRCommittee + SBIndependence + SBMeetings +
    LogTA + ROA + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.45334 -0.07113  0.00492  0.07148  0.27106

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)      -0.4295208  0.1404975  -3.057 0.002449 **
SBGend            0.3146493  0.0950782   3.309 0.001057 **
DebtRatio         0.1115293  0.0994778   1.121 0.263179
SBSize            0.0027531  0.0019269   1.429 0.154184
MBSize            0.0042332  0.0055676   0.760 0.447702
Year             -0.0270333  0.0142778  -1.893 0.059330 .
SusCompIncen      0.0297850  0.0150486   1.979 0.048760 *
CSRCommittee      0.1006465  0.0186302   5.402 1.40e-07 ***
SBIndependence    0.1333946  0.0224697   5.937 8.53e-09 ***
SBMeetings        0.0009425  0.0015244   0.618 0.536886
LogTA             0.0397089  0.0067517   5.881 1.15e-08 ***
ROA               0.1275917  0.1226545   1.040 0.299114
MBGend            0.1154421  0.0530110   2.178 0.030257 *
Industry_15      -0.1041296  0.0689404  -1.510 0.132054
Industry_20      -0.1270470  0.0648042  -1.960 0.050925 .
Industry_25      -0.1684743  0.0669249  -2.517 0.012378 *
Industry_30      -0.0940142  0.0699636  -1.344 0.180107
Industry_35      -0.0907173  0.0665997  -1.362 0.174245
Industry_45      -0.0516012  0.0650134  -0.794 0.428037
Industry_50      -0.1991807  0.0677319  -2.941 0.003546 **
Industry_55      -0.2970132  0.0800446  -3.711 0.000249 ***
Industry_60      -0.1793425  0.0711640  -2.520 0.012283 *
SBGend:DebtRatio -0.5686874  0.3175862  -1.791 0.074421 .
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1181 on 282 degrees of freedom
Multiple R-squared:  0.5821,   Adjusted R-squared:  0.5495
F-statistic: 17.86 on 22 and 282 DF,  p-value: < 2.2e-16

interaction15<-lm(ESG ~ SBGend*LogTA + DebtRatio + ROA + SBSize + MBSi
ze + Year + SusCompIncen + CSRCommittee + SBIndependence + SBMeetings +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction15)

Call:
lm(formula = ESG ~ SBGend * LogTA + DebtRatio + ROA + SBSize +
    MBSize + Year + SusCompIncen + CSRCommittee + SBIndependence +
    SBMeetings + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.46209 -0.07179  0.00762  0.07461  0.26243

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.2396048  0.2877850  -0.833  0.40578
SBGend         -0.4046312  0.8658141  -0.467  0.64062
LogTA           0.0315430  0.0137360   2.296  0.02239 *
DebtRatio      -0.0443069  0.0466409  -0.950  0.34295
ROA             0.1257231  0.1234249   1.019  0.30926
```

```
SBSize           0.0021573  0.0019323   1.116  0.26518
MBSize           0.0052592  0.0055614   0.946  0.34513
Year            -0.0254820  0.0143582  -1.775  0.07702 .
SusCompIncen     0.0287391  0.0151129   1.902  0.05824 .
CSRCommittee     0.1087649  0.0186151   5.843 1.41e-08 ***
SBIndependence   0.1200879  0.0225102   5.335 1.97e-07 ***
SBMeetings       0.0008525  0.0015361   0.555  0.57933
MBGend           0.1051096  0.0547164   1.921  0.05574 .
Industry_15     -0.0756807  0.0681951  -1.110  0.26804
Industry_20     -0.1032736  0.0644502  -1.602  0.11019
Industry_25     -0.1488413  0.0672107  -2.215  0.02759 *
Industry_30     -0.0798679  0.0699377  -1.142  0.25443
Industry_35     -0.0657895  0.0662452  -0.993  0.32150
Industry_45     -0.0332964  0.0645612  -0.516  0.60644
Industry_50     -0.1810236  0.0677073  -2.674  0.00794 **
Industry_55     -0.2574158  0.0786553  -3.273  0.00120 **
Industry_60     -0.1454521  0.0708587  -2.053  0.04102 *
SBGend:LogTA     0.0273972  0.0404648   0.677  0.49892
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5781,   Adjusted R-squared:  0.5451
F-statistic: 17.56 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction16<-lm(ESG ~ SBGend*ROA + LogTA + DebtRatio + ROA + SBSize +
MBSize + Year + SusCompIncen + CSRCommittee + SBIndependence + SBMeeti
ngs + MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, d
ata=sample)
summary(interaction16)

Call:
lm(formula = ESG ~ SBGend * ROA + LogTA + DebtRatio + ROA + SBSize +
    MBSize + Year + SusCompIncen + CSRCommittee + SBIndependence +
    SBMeetings + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47592 -0.07292  0.00849  0.07287  0.26470

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4031735  0.1408551  -2.862 0.004521 **
SBGend          0.1412994  0.0738522   1.913 0.056726 .
ROA            -0.0930658  0.2755710  -0.338 0.735826
LogTA           0.0402386  0.0068171   5.903 1.03e-08 ***
DebtRatio      -0.0471923  0.0465596  -1.014 0.311648
SBSize          0.0023669  0.0019202   1.233 0.218751
MBSize          0.0042763  0.0056911   0.751 0.453035
Year           -0.0259444  0.0143287  -1.811 0.071259 .
SusCompIncen    0.0295456  0.0151266   1.953 0.051783 .
CSRCommittee    0.1051905  0.0184839   5.691 3.16e-08 ***
SBIndependence  0.1267239  0.0221827   5.713 2.82e-08 ***
SBMeetings      0.0009716  0.0015317   0.634 0.526392
MBGend          0.1156656  0.0532839   2.171 0.030785 *
Industry_15    -0.0867411  0.0683516  -1.269 0.205472
Industry_20    -0.1123849  0.0644035  -1.745 0.082072 .
Industry_25    -0.1576545  0.0668557  -2.358 0.019050 *
Industry_30    -0.0848295  0.0700271  -1.211 0.226763
Industry_35    -0.0739374  0.0660319  -1.120 0.263785
Industry_45    -0.0388624  0.0647920  -0.600 0.549119
Industry_50    -0.1914719  0.0680221  -2.815 0.005224 **
Industry_55    -0.2720512  0.0787864  -3.453 0.000639 ***
Industry_60    -0.1620712  0.0707063  -2.292 0.022632 *
SBGend:ROA      0.7742362  0.8936568   0.866 0.387025
---
Signif. codes:
```

```
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1186 on 282 degrees of freedom
Multiple R-squared:  0.5785,   Adjusted R-squared:  0.5456
F-statistic: 17.59 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction17<-lm(ESG ~ SBGend*SBMeetings + LogTA + ROA + DebtRatio + S
BSize + MBSize + Year + SusCompIncen + CSRCommittee + SBIndependence +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction17)
```

```
Call:
lm(formula = ESG ~ SBGend * SBMeetings + LogTA + ROA + DebtRatio +
    SBSize + MBSize + Year + SusCompIncen + CSRCommittee + SBIndepende
nce +
    MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
    Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_6
0,
    data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47635 -0.07322  0.00677  0.07395  0.26809

Coefficients:
                  Estimate Std. Error t value Pr(>|t|)
(Intercept)       -4.002e-01  1.418e-01  -2.823  0.00510 **
SBGend             1.435e-01  8.842e-02   1.623  0.10569
SBMeetings        -8.962e-05  2.392e-03  -0.037  0.97014
LogTA              3.939e-02  6.800e-03   5.793 1.84e-08 ***
ROA                1.285e-01  1.241e-01   1.036  0.30113
DebtRatio         -4.645e-02  4.658e-02  -0.997  0.31956
SBSize             2.282e-03  1.921e-03   1.188  0.23575
MBSize             5.578e-03  5.578e-03   1.000  0.31821
Year              -2.581e-02  1.434e-02  -1.800  0.07300 .
SusCompIncen       2.799e-02  1.519e-02   1.842  0.06649 .
CSRCommittee       1.075e-01  1.843e-02   5.829 1.52e-08 ***
SBIndependence     1.209e-01  2.243e-02   5.393 1.47e-07 ***
MBGend             1.118e-01  5.337e-02   2.095  0.03703 *
Industry_15       -7.509e-02  6.847e-02  -1.097  0.27372
Industry_20       -1.030e-01  6.466e-02  -1.593  0.11239
Industry_25       -1.510e-01  6.702e-02  -2.253  0.02506 *
Industry_30       -7.775e-02  7.017e-02  -1.108  0.26884
Industry_35       -6.641e-02  6.629e-02  -1.002  0.31734
Industry_45       -2.993e-02  6.494e-02  -0.461  0.64526
Industry_50       -1.800e-01  6.799e-02  -2.648  0.00856 **
Industry_55       -2.584e-01  7.869e-02  -3.284  0.00115 **
Industry_60       -1.449e-01  7.149e-02  -2.027  0.04357 *
SBGend:SBMeetings  4.857e-03  8.751e-03   0.555  0.57935
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5778,   Adjusted R-squared:  0.5449
F-statistic: 17.55 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction18<-lm(ESG ~ SBGend*SBIndependence + SBMeetings + LogTA + R
OA + DebtRatio + SBSize + MBSize + Year + SusCompIncen + CSRCommittee +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction18)
```

```
Call:
lm(formula = ESG ~ SBGend * SBIndependence + SBMeetings + LogTA +
    ROA + DebtRatio + SBSize + MBSize + Year + SusCompIncen +
    CSRCommittee + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
```

```
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.48636 -0.07552  0.01024  0.07320  0.26005

Coefficients:
                          Estimate Std. Error t value Pr(>|t|)
(Intercept)            -0.3851628  0.1428112  -2.697  0.00742 **
SBGend                  0.1035210  0.0979533   1.057  0.29149
SBIndependence          0.0823936  0.0475167   1.734  0.08401 .
SBMeetings              0.0007106  0.0015468   0.459  0.64630
LogTA                   0.0390211  0.0068069   5.733 2.54e-08 ***
ROA                     0.1273470  0.1232756   1.033  0.30248
DebtRatio              -0.0513946  0.0468409  -1.097  0.27348
SBSize                  0.0023872  0.0019200   1.243  0.21479
MBSize                  0.0055214  0.0055584   0.993  0.32139
Year                   -0.0263120  0.0143263  -1.837  0.06732 .
SusCompIncen            0.0290756  0.0151009   1.925  0.05518 .
CSRCommittee            0.1082674  0.0184378   5.872 1.21e-08 ***
MBGend                  0.1164192  0.0532894   2.185  0.02974 *
Industry_15            -0.0702214  0.0685682  -1.024  0.30666
Industry_20            -0.0956737  0.0652148  -1.467  0.14348
Industry_25            -0.1444225  0.0674333  -2.142  0.03307 *
Industry_30            -0.0704625  0.0706771  -0.997  0.31964
Industry_35            -0.0625365  0.0663316  -0.943  0.34660
Industry_45            -0.0262258  0.0649605  -0.404  0.68673
Industry_50            -0.1736033  0.0683529  -2.540  0.01163 *
Industry_55            -0.2549436  0.0785723  -3.245  0.00132 **
Industry_60            -0.1402695  0.0711168  -1.972  0.04954 *
SBGend:SBIndependence   0.1475723  0.1510172   0.977  0.32931
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1186 on 282 degrees of freedom
Multiple R-squared:  0.5788,   Adjusted R-squared:  0.5459
F-statistic: 17.61 on 22 and 282 DF,  p-value: < 2.2e-16

interaction19<-lm(ESG ~ SBGend*CSRCommittee + SBIndependence + SBMeeti
ngs + LogTA + ROA + DebtRatio + SBSize + MBSize + Year + SusCompIncen +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction19)

Call:
lm(formula = ESG ~ SBGend * CSRCommittee + SBIndependence + SBMeetings
+
    LogTA + ROA + DebtRatio + SBSize + MBSize + Year + SusCompIncen +
    MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 +
    Industry_35 + Industry_45 + Industry_50 + Industry_55 + Industry_6
0,
    data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.45611 -0.07364  0.00880  0.06765  0.25611

Coefficients:
                        Estimate Std. Error t value Pr(>|t|)
(Intercept)           -0.387680   0.140280  -2.764  0.00609 **
SBGend                 0.045021   0.089111   0.505  0.61380
CSRCommittee           0.046859   0.035050   1.337  0.18233
SBIndependence         0.121555   0.021788   5.579 5.67e-08 ***
SBMeetings             0.001138   0.001526   0.746  0.45639
LogTA                  0.039395   0.006743   5.842 1.42e-08 ***
ROA                    0.129527   0.122498   1.057  0.29124
DebtRatio             -0.037294   0.046483  -0.802  0.42305
SBSize                 0.002201   0.001909   1.153  0.24985
MBSize                 0.005090   0.005527   0.921  0.35786
Year                  -0.023707   0.014293  -1.659  0.09829 .
SusCompIncen           0.029225   0.015019   1.946  0.05266 .
```

```
MBGend               0.106009   0.053061   1.998  0.04669 *
Industry_15         -0.064921   0.067903  -0.956  0.33985
Industry_20         -0.089028   0.064420  -1.382  0.16807
Industry_25         -0.138375   0.066807  -2.071  0.03924 *
Industry_30         -0.070239   0.069687  -1.008  0.31436
Industry_35         -0.052108   0.066131  -0.788  0.43138
Industry_45         -0.019440   0.064550  -0.301  0.76351
Industry_50         -0.166706   0.067686  -2.463  0.01438 *
Industry_55         -0.246409   0.078141  -3.153  0.00179 **
Industry_60         -0.133841   0.070187  -1.907  0.05755 .
SBGend:CSRCommittee  0.219514   0.109455   2.006  0.04586 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.118 on 282 degrees of freedom
Multiple R-squared:  0.5833,   Adjusted R-squared:  0.5508
F-statistic: 17.94 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction20<-lm(ESG ~ SBGend*SusCompIncen + CSRCommittee + SBIndepen
dence + SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize + Year +
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction20)

Call:
lm(formula = ESG ~ SBGend * SusCompIncen + CSRCommittee + SBIndependen
ce +
    SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize +
    Year + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47200 -0.06867  0.00872  0.07310  0.26888

Coefficients:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)         -0.414434   0.141165  -2.936 0.003601 **
SBGend               0.196476   0.067899   2.894 0.004105 **
SusCompIncen         0.045234   0.037687   1.200 0.231045
CSRCommittee         0.106047   0.018478   5.739 2.45e-08 ***
SBIndependence       0.123740   0.021912   5.647 3.98e-08 ***
SBMeetings           0.001032   0.001547   0.667 0.505452
LogTA                0.039720   0.006790   5.850 1.36e-08 ***
ROA                  0.117679   0.123382   0.954 0.341013
DebtRatio           -0.045611   0.046597  -0.979 0.328491
SBSize               0.002397   0.001930   1.242 0.215366
MBSize               0.005244   0.005566   0.942 0.346910
Year                -0.025379   0.014406  -1.762 0.079205 .
MBGend               0.113191   0.053287   2.124 0.034527 *
Industry_15         -0.082732   0.068222  -1.213 0.226261
Industry_20         -0.109818   0.064412  -1.705 0.089308 .
Industry_25         -0.157074   0.067086  -2.341 0.019910 *
Industry_30         -0.084778   0.070412  -1.204 0.229591
Industry_35         -0.073111   0.066237  -1.104 0.270626
Industry_45         -0.035710   0.064714  -0.552 0.581512
Industry_50         -0.187683   0.067959  -2.762 0.006128 **
Industry_55         -0.265992   0.078414  -3.392 0.000793 ***
Industry_60         -0.155192   0.070145  -2.212 0.027737 *
SBGend:SusCompIncen -0.055276   0.116360  -0.475 0.635127
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1187 on 282 degrees of freedom
Multiple R-squared:  0.5777,   Adjusted R-R²:  0.5448
F-statistic: 17.54 on 22 and 282 DF,  p-value: < 2.2e-16
```

```
interaction21<-lm(ESG ~ SBGend*Year + SusCompIncen + CSRCommittee + SB
Independence + SBMeetings + LogTA + ROA + DebtRatio + SBSize + MBSize +
```

```
MBGend + Industry_15 + Industry_20 + Industry_25 + Industry_30 + Indus
try_35 + Industry_45 + Industry_50 + Industry_55 + Industry_60, data=s
ample)
summary(interaction21)

Call:
lm(formula = ESG ~ SBGend * Year + SusCompIncen + CSRCommittee +
    SBIndependence + SBMeetings + LogTA + ROA + DebtRatio + SBSize +
    MBSize + MBGend + Industry_15 + Industry_20 + Industry_25 +
    Industry_30 + Industry_35 + Industry_45 + Industry_50 + Industry_5
5 +
    Industry_60, data = sample)

Residuals:
     Min       1Q   Median       3Q      Max
-0.47724 -0.07031  0.01013  0.07451  0.26404

Coefficients:
                 Estimate Std. Error t value Pr(>|t|)
(Intercept)    -0.4083489  0.1410758  -2.895 0.004094 **
SBGend          0.1731667  0.0752214   2.302 0.022058 *
Year           -0.0305715  0.0335108  -0.912 0.362397
SusCompIncen    0.0286703  0.0151636   1.891 0.059685 .
CSRCommittee    0.1071040  0.0184966   5.790 1.87e-08 ***
SBIndependence  0.1236149  0.0219178   5.640 4.13e-08 ***
SBMeetings      0.0009189  0.0015348   0.599 0.549852
LogTA           0.0396800  0.0067979   5.837 1.46e-08 ***
ROA             0.1211464  0.1233504   0.982 0.326877
DebtRatio      -0.0459907  0.0466072  -0.987 0.324600
SBSize          0.0023008  0.0019216   1.197 0.232192
MBSize          0.0052997  0.0055707   0.951 0.342247
MBGend          0.1138499  0.0533244   2.135 0.033619 *
Industry_15    -0.0801011  0.0679961  -1.178 0.239780
Industry_20    -0.1075494  0.0642382  -1.674 0.095194 .
Industry_25    -0.1543158  0.0668324  -2.309 0.021667 *
Industry_30    -0.0813760  0.0700322  -1.162 0.246226
Industry_35    -0.0703841  0.0659874  -1.067 0.287052
Industry_45    -0.0340080  0.0646278  -0.526 0.599154
Industry_50    -0.1844673  0.0676121  -2.728 0.006766 **
Industry_55    -0.2635865  0.0782604  -3.368 0.000862 ***
Industry_60    -0.1534838  0.0700871  -2.190 0.029351 *
SBGend:Year     0.0155551  0.1035932   0.150 0.880749
---
Signif. codes:
0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 0.1188 on 282 degrees of freedom
Multiple R-squared:  0.5774,   Adjusted R-squared:  0.5444
F-statistic: 17.51 on 22 and 282 DF,  p-value: < 2.2e-16
```