Supplementary Material

Appendix 1.

ESG Activities

* Training to raise the awareness of environmental management and strengthening competence
* Efforts for community development
* Function of oversight by the board of commissioners

Green innovation

* Energy efficient products
* Design and implement a waste recycling program
* Acquired new technologies
* Upgraded current technologies

Sustainable competitive advantage

* Average growth rate of annual sales
* Stakeholder satisfaction level

Table 1. Respondents and company characteristics in this study

|  |  |  |
| --- | --- | --- |
|  | **Counts** | **% of Total** |
| **Gender** |  |  |
| Female | 25 | 21.93 |
| Male | 89 | 78.07 |
| **Tenure** |  |  |
| < 5 Years | 18 | 15.79 |
| 5-10 Years | 34 | 29.82 |
| > 10 Years | 62 | 54.39 |
| **Type** |  |  |
| Private | 79 | 69.30 |
| Public | 35 | 30.70 |
| **Business entities** |  |  |
| Foreign-owned Company | 49 | 42.98 |
| Local Company | 65 | 57.02 |
| **Size** |  |  |
| Medium | 21 | 18.42 |
| Big | 93 | 81.58 |
| **Sector** |  |  |
| Manufacturing | 29 | 25.44 |
| Finance and Insurance | 14 | 12.28 |
| General Trading and Maintenance | 14 | 12.28 |
| Health Service | 10 | 8.77 |
| Freight and Forwarding | 9 | 7.89 |
| Information and Communication | 9 | 7.89 |
| Mining and Quarrying | 8 | 7.02 |
| Real Estate | 6 | 5.26 |
| Professional Service | 5 | 4.39 |
| Education | 4 | 3.51 |
| Power and Energy | 4 | 3.51 |
| Construction | 2 | 2.63 |

Table 2. Evaluation of outer loading, mean, SD, VIF, and reliability (outer model)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Indicators | Outer Loading | Mean | SD | VIF | CA | AVE |
| CA1 | 0.95 | 4.04 | 0.73 | 2.34 | 0.86 | 0.88 |
| CA2 | 0.93 | 4.11 | 0.68 | 2.31 |  |  |
| GI1 | 0.76 | 3.61 | 1.04 | 1.41 | 0.77 | 0.59 |
| GI2 | 0.80 | 4.17 | 0.64 | 1.66 |  |  |
| GI3 | 0.71 | 3.66 | 0.75 | 1.40 |  |  |
| GI4 | 0.81 | 3.88 | 0.84 | 1.56 |  |  |
| ENV | 0.80 | 3.93 | 0.70 | 1.71 | 0.74 | 0.65 |
| GOV | 0.85 | 4.37 | 0.48 | 1.67 |  |  |
| SOC | 0.78 | 4.27 | 0.67 | 1.44 |  |  |

Table 3. Results of HTMT and inter-correlations between constructs.

|  |  |  |  |
| --- | --- | --- | --- |
| **HTMT** | **ESG** | **GI** | **SCA** |
| ESG activities |  |  |  |
| Green innovation | 0.64 |  |  |
| Sustainability competitive advantage | 0.64 | 0.79 |  |
| **Correlation** | **ESG** | **GI** | **SCA** |
| ESG activities | 1 | 0.49 | 0.51 |
| Green innovation | 0.49 | 1 | 0.65 |
| Sustainability competitive advantage | 0.51 | 0.65 | 1 |

Table 4. MICOM analysis results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step 2** | **Original correlation** | **Correlation permutation mean** | **5.00%** | **Permutation p value** |  |
| ESG | 1.00 | 0.99 | 0.97 | 0.52 |  |
| GI | 1.00 | 0.99 | 0.98 | 0.80 |  |
| SCA | 1.00 | 1.00 | 1.00 | 0.07 |  |
| **Step 3A** | **Original difference** | **Permutation mean difference** | **2.50%** | **97.50%** | **Permutation p value** |
| ESG | -0.26 | 0.02 | -0.42 | 0.44 | 0.24 |
| GI | 0.04 | 0.01 | -0.40 | 0.42 | 0.87 |
| SCA | 0.22 | 0.01 | -0.42 | 0.39 | 0.32 |
| **Step 3B** | **Original difference** | **Permutation mean difference** | **2.50%** | **97.50%** | **Permutation p value** |
| ESG | 0.25 | 0.03 | -0.52 | 0.51 | 0.35 |
| GI | -0.04 | 0.03 | -0.62 | 0.81 | 0.91 |
| SCA | -0.17 | 0.04 | -0.55 | 0.66 | 0.59 |

Table 5. Assessment of the Structural Model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | ***Estimate*** | ***SD*** | ***t*** | ***P values*** | ***R2*** | ***f2*** |
| *Full data* |  |  |  |  |  |  |
| ESG -> GI | 0.49 | 0.08 | 5.76 | 0.00 | 0.24 | 0.31 |
| ESG -> SCA | 0.25 | 0.09 | 2.93 | 0.00 | 0.47 | 0.09 |
| GI -> SCA | 0.53 | 0.09 | 6.22 | 0.00 |  | 0.41 |
| ESG -> GI -> SCA | 0.26 | 0.26 | 4.28 | 0.00 |  |  |
| *Private* |  |  |  |  |  |  |
| ESG -> GI | 0.47 | 0.11 | 4.29 | 0.00 | 0.22 | 0.28 |
| ESG -> SCA | 0.29 | 0.11 | 2.71 | 0.01 | 0.47 | 0.13 |
| GI -> SCA | 0.50 | 0.10 | 4.81 | 0.00 |  | 0.37 |
| ESG -> GI -> SCA | 0.23 | 0.07 | 3.55 | 0.00 |  |  |
| *Public* |  |  |  |  |  |  |
| ESG -> GI | 0.59 | 0.11 | 5.21 | 0.00 | 0.35 | 0.55 |
| ESG -> SCA | 0.19 | 0.15 | 1.27 | 0.21 | 0.54 | 0.05 |
| GI -> SCA | 0.61 | 0.16 | 3.77 | 0.00 |  | 0.51 |
| ESG -> GI -> SCA | 0.36 | 0.14 | 2.60 | 0.01 |  |  |