CHAPTER V

CONCLUSION

5.1 Research Conclusion

This study examines the effect of Environmental, Social, and Governance performance on firm performance and evaluates CEO narcissism as a moderator of each ESG pillar-ROA relationship. Firm performance is measured by Return on Assets, CEO narcissism is measured through LinkedIn-based unobtrusive indicators, and firm size is included as a control. The final balanced panel contains 60 firm-year observations from 12 listed firms during 2020-2024. Based on the Chow test, Hausman test, and Lagrange Multiplier test, the Random Effects Model is selected. The final moderated model is estimated with firm-clustered robust standard errors because groupwise heteroskedasticity is detected.

The conclusions are organized directly around the research questions and hypotheses:

1. Environmental performance has a positive and statistically significant effect on ROA. The final mean-centered coefficient is 0.0018838 with $p < 0.001$. H1 is supported. The evidence indicates that stronger environmental performance is associated with more efficient use of corporate assets, potentially through resource efficiency, reduced environmental exposure, and stronger stakeholder legitimacy.
2. Social performance has a positive and statistically significant effect on ROA. The final mean-centered coefficient is 0.0009339 with $p = 0.003$. H2 is supported. The finding suggests that employee, customer, product, community, and broader stakeholder practices can contribute to operational stability and profitability.
3. Governance performance has a positive and statistically significant effect on ROA at the sample mean of CEO narcissism. The coefficient is 0.0006409 with $p = 0.030$. H3 is supported. Stronger governance is associated with improved profitability through better oversight, reporting credibility, and resource-allocation discipline.

4. CEO narcissism positively and significantly moderates the Environmental performance-ROA relationship. The interaction coefficient is 0.0022589 with $p < 0.001$. H4 is supported. Environmental performance produces a stronger profitability association as CEO narcissism rises, indicating that narcissistic ambition and visibility seeking may intensify the financial effect of visible environmental strategy.
5. CEO narcissism does not significantly moderate the Social performance-ROA relationship. The coefficient is -0.0010014 with $p = 0.142$. H5 is not supported. Although the estimated sign suggests a weakening tendency, the data do not establish that the Social performance effect differs systematically across levels of CEO narcissism.
6. CEO narcissism negatively and significantly moderates the Governance performance-ROA relationship. The interaction coefficient is -0.0027039 with $p < 0.001$. H6 is supported. Higher narcissism weakens the positive governance effect and can produce a negative model-implied governance slope at high narcissism. This result highlights the conflict between executive dominance and the accountability, transparency, and restraint required by effective governance.
7. The standalone effects of CEO narcissism and firm size are not statistically significant at the 5 percent level. CEO narcissism therefore operates primarily as a boundary condition rather than as an unconditional predictor of ROA in this model. The final model is jointly significant and explains 68.84 percent of the total ROA variation within the sample, but the explanatory power should not be interpreted as definitive causal proof.

Overall, the study demonstrates that ESG-performance relationships are heterogeneous across pillars and leadership contexts. Environmental, Social, and Governance performance are each positively related to ROA, but CEO narcissism changes the strength and direction of two of these relationships. The central contribution is therefore not a simple claim that ESG improves performance or that narcissistic leadership is beneficial or harmful. The evidence shows an asymmetric conditional pattern: narcissism strengthens the Environmental channel, leaves the Social channel statistically unchanged, and weakens the Governance channel.

5.2 Research Limitations

The findings should be interpreted within the methodological boundaries of the study. The principal limitations are as follows:

1. The final sample contains only 12 firms and 60 firm-year observations. The strict requirements for complete ESG pillar scores, a stable CEO, and an accessible LinkedIn profile improve consistency but create substantial selection constraints. The small number of firms limits statistical power, external validity, and the reliability of asymptotic cluster-robust inference.
2. The sample is described only as manufacturing in the research title and methodology, so the scope for this research did not research another industries.
3. CEO narcissism is measured through LinkedIn self-presentation indicators. The method avoids self-report bias and is appropriate for archival research, but it may capture digital visibility, career networking, or profile completeness in addition to narcissistic tendencies. The measurement is also effectively time-invariant and may not reflect changes in executive behavior over the five-year period.
4. The analysis uses ROA as the sole measure of firm performance. ROA captures operating efficiency but does not represent market valuation, shareholder return, financing cost, growth, or risk. ESG may affect accounting and market outcomes differently, as shown by prior research.
5. The study does not fully resolve endogeneity. Profitable firms may have greater financial capacity to improve ESG performance, while omitted factors such as leverage, firm age, ownership structure, board characteristics, industry competition, and macroeconomic conditions may affect both ESG and ROA. The coefficients should therefore be interpreted as conditional associations rather than definitive causal effects.

6. The model-selection tests provided in the STATA output are estimated from the initial non-interaction specification. The selected random-effects structure is then applied to the final moderated specification, but a separate Hausman or correlated-random-effects assessment for the complete interaction model is not documented.
7. The Modified Wald test identifies groupwise heteroskedasticity, and the final standard errors are clustered by firm. However, there are only 12 clusters. Conventional cluster-robust standard errors can be downward biased with a small cluster count. A wild-cluster bootstrap or small-sample correction would provide stronger robustness evidence.
8. The conditional-slope table and interaction graphs are calculated from the reported coefficients, but the supplied output does not include formal margins, simple-slope standard errors, or a Johnson-Neyman test. The graphs clarify the interaction pattern but should not be treated as separate hypothesis tests.

5.3 Research Implications

5.3.1 Theoretical Implications

The study extends ESG-performance research by demonstrating that the three ESG pillars should not be treated as interchangeable. Each pillar has a positive direct relationship with ROA, yet the leadership boundary condition differs sharply. This supports a disaggregated approach to ESG and cautions against relying solely on composite scores.

The findings integrate Stakeholder Theory, Agency Theory, and Upper Echelons Theory. Stakeholder Theory explains the positive operational value of Environmental and Social performance. Agency Theory explains the positive role of Governance and its vulnerability to executive opportunism. Upper Echelons Theory explains why the same ESG practice may produce different financial outcomes under different CEOs.

The asymmetric moderation contributes to CEO narcissism research. Narcissism does not have a significant unconditional relationship with ROA, but it strengthens the Environmental pathway and weakens the Governance pathway. This indicates that executive personality operates through strategic domains rather than through a single direct performance effect.

The study also contributes to the emerging literature on unobtrusive digital measures of executive psychology. The LinkedIn-based approach offers access to executive self-presentation that is difficult to obtain through surveys, while the limitations emphasize the need for stronger construct validation and multi-method measurement.

5.3.2 Managerial and Board Implications

Corporate management should evaluate ESG investments at the pillar level. Environmental programs should be connected to measurable operating outcomes such as energy efficiency, waste reduction, production continuity, and asset utilization. Social programs should be institutionalized through workforce, customer, product, and community systems rather than being treated as temporary public-relations activities.

Boards should recognize that a narcissistic CEO can create both strategic energy and governance risk. In environmental strategy, ambitious leadership may accelerate innovation and execution. The board should preserve that momentum while requiring objective investment criteria, verified environmental targets, and post-investment performance review.

The negative governance interaction requires stronger safeguards when CEO narcissism is high. Independent directors, audit committees, internal auditors, risk officers, and remuneration committees should have genuine authority and access to information. Governance mechanisms should be evaluated by their operational effectiveness rather than by formal disclosure alone.

Succession and executive evaluation processes should not treat confidence, visibility, and self-promotion as equivalent to leadership effectiveness. Personality-related risks should be assessed together with strategic capability, ethical judgment, openness to challenge, and respect for control systems.

5.3.3 Investor Implications

Investors should look beyond aggregate ESG ratings and identify which pillar drives a firm's score. The present evidence indicates that Environmental, Social, and Governance performance have different coefficient magnitudes and are differently conditioned by CEO narcissism.

Executive behavior should be incorporated into ESG due diligence. A highly visible CEO may enhance the financial return of ambitious environmental strategy, but the same personality pattern may weaken the value of governance arrangements. Investors should compare sustainability claims with capital expenditure, operational indicators, board independence, audit quality, and internal-control disclosures.

The nonsignificant main effect of CEO narcissism means that personality should not be used as a standalone buy-or-sell signal. Its relevance lies in how it interacts with strategic systems. A contextual analysis is more defensible than assuming that narcissistic executives are uniformly value creating or value destroying.

5.3.4 Regulatory Implications

Regulators and the Indonesia Stock Exchange should continue promoting pillar-level ESG transparency. Composite scores are useful summaries, but they may conceal opposing environmental, social, and governance mechanisms. Consistent definitions and comparable disclosures would improve the ability of investors and researchers to evaluate substantive ESG performance.

The negative governance interaction suggests that formal compliance may be insufficient when executive dominance is high. Regulatory attention should include board independence, related-party oversight, internal-control effectiveness, whistleblower protection, and the credibility of assurance over sustainability information.

Guidance on executive and board disclosure could improve the assessment of leadership risk without requiring psychological labeling. Transparent reporting of CEO tenure, duality, ownership, compensation structure, board challenge, and governance breaches can provide observable indicators relevant to upper-echelon and agency concerns.

5.4 Research Recommendations

Based on the findings and limitations, the following recommendations are proposed for future research:

1. Expand the sample across a longer period and a larger number of firms. Future studies should either restrict the dataset to firms that are conventionally classified as manufacturing or revise the research title and population to reflect a multi-industry sample.
2. Validate CEO narcissism through multiple measures. LinkedIn indicators can be combined with annual-report photographs, signature size, linguistic analysis, compensation prominence, third-party ratings, or survey instruments. A multi-method design would reduce the risk that one proxy captures digital activity rather than narcissism.
3. Use additional performance outcomes, including ROE, Tobin's Q, stock return, sales growth, cost of capital, and risk measures. Comparing accounting and market indicators would clarify whether ESG and narcissism affect internal efficiency and external valuation in the same way.
4. Introduce temporal structure. Lagged ESG variables, lagged ROA, and changes in CEO characteristics can reduce simultaneity concerns and provide a more credible sequence between ESG activity and subsequent performance.
5. Apply stronger causal and robustness methods where the data permit. Potential approaches include dynamic panel system GMM, instrumental variables, propensity-score methods, correlated random effects, firm and year fixed effects, and difference-in-differences designs around regulatory or leadership changes.
6. Re-estimate the interaction effects using STATA margins, simple-slopes tests, and the Johnson-Neyman technique. These procedures would identify the levels of

CEO narcissism at which the Environmental and Governance slopes are statistically significant.

7. Because the final analysis contains only 12 firm clusters, future work should use wild-cluster bootstrap p-values or another small-cluster correction. This would test whether the significance of the Environmental and Governance interaction terms remains robust under more conservative inference.
8. Add governance and financial controls such as leverage, liquidity, firm age, board independence, institutional ownership, CEO duality, and ownership concentration. Macroeconomic and year effects should also be considered to separate firm-level ESG mechanisms from economy-wide shocks during 2020-2024.
9. Examine mechanisms rather than only reduced-form interactions. Environmental innovation, internal-control quality, information transparency, financing constraints, employee productivity, and reputational capital are plausible mediators that can explain why CEO narcissism strengthens one ESG pillar while weakening another.