CHAPTER V

CONCLUSIONS AND IMPLICATIONS

A. Conclusions

Based on the efficiency analysis of coal companies in Indonesia using the Data Envelopment Analysis (DEA) method, the following conclusions can be drawn:

1. The analysis using Data Envelopment Analysis (DEA) shows that all six coal companies—PT Adaro Energy Indonesia Tbk (ADRO), PT Baramulti Suksessarana Tbk (BSSR), PT Dian Swastatika Sentosa Tbk (DSSA), PT Golden Energy Mines Tbk (GEMS), PT Harum Energy Tbk (HRUM), and PT Resource Alam Indonesia Tbk (KKGI)—are operating at an efficient level with a technical efficiency score of 1.000. This indicates that these companies are optimizing their inputs to achieve their outputs without any waste.
2. Input variables are crucial in determining a company's efficiency because well-planned and accurate use of these variables ensures that the projected values align with the DEA calculations.

B. Implications

Based on the conclusions above, the research provides the following implications for coal companies:

1. Optimization of Input Management

Coal companies should focus on continuously improving their management of input variables, such as assets, costs, and expenses. By implementing strategic planning and operational efficiencies, companies can maintain or enhance their efficiency scores and align their projected values with DEA calculations.

2. Benchmarking and Best Practices

   Companies can use the efficiency levels observed in the study as benchmarks for their operations. They should analyze the practices of the most efficient companies and adopt best practices to enhance their own efficiency. This could involve optimizing resource use, reducing unnecessary costs, and improving overall operational processes.

3. Continuous Improvement

   Despite achieving high efficiency scores, companies should not become complacent. Ongoing efforts to refine and improve resource management, cost control, and operational strategies are essential to sustaining high efficiency and adapting to market changes.

4. Revenue and Cost Management

   Companies should pay close attention to their revenue ratios and cost management strategies. Efficient cost management relative to revenue can further enhance their financial performance and competitive position in the industry.

These implications outline how coal companies can use the research findings to drive efficiency, improve operational practices, and create supportive policies to foster industry growth and sustainability.

C. Limitations of the Research

This research utilizes the Data Envelopment Analysis (DEA) method, so the results obtained are focused solely on the technical analysis of coal companies. The study is limited to coal companies listed on the Indonesia Stock Exchange (IDX). Future research is expected to complement this study by including analyses of allocative and economic efficiency, as well as expanding the research to cover a broader range of coal companies. These limitations indicate areas for potential enhancement in future research, suggesting a broader and more comprehensive approach to efficiency analysis in the coal industry.