OPTIMIZATION MODELS FOR A SELECTED AUTOMOBILE COMPONENTS INDUSTRY:

THE CASE OF INDONESIA

by

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ABSTRACT

This study examines the optimization models to help decision makers choose the most desirable mix of economic policies in Automobile Components Industry. The first goal programming model provide a framework for analyzing the impact of various conflicting objectives in the development strategy of the industry. Various policy scenarios generated by assigning different priority structures to the objectives in the model are studied. Thus a useful planning tool which demonstrates the exact impact of the policy on various objectives is provided to the decision makers.

The model further refined by considering the long term capacity expansion or investment in the industry. This capacity expansion model used the previous goal programming model solutions as the input data for the capacity sizes. This model employs mixed integer programming to analyze capacity expansion problem in the presence of economic of scale. The model permits decision about size, time phasing, technology and industry strategy to be made within its framework.

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