

The input relaxation model and its stochastic version, recently introduced in data envelopment analysis (DEA) literature, uses more flexibility in changes of the used input combination to find the maximum possible output and can be useful to resource management. We study congestion issues in this setting. Deterministic equivalence to the stochastic congestion model is obtained. The deterministic equivalence is typically non-linear. It is, however, shown that under fairly general conditions this non-linear model can be replaced by an ordinary deterministic DEA model. When allowable limits of data variations for evaluating decision making unit is permitted, sensitivity analysis is studied.