Inverse Linear Programming in DEA

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Abstract—Despite the large uses of inverse DEA models, there is not any single application of inverse linear programming in DEA when the definition of inverse linear programming is taken under account. Thus the goal of this paper is applying the inverse linear programming into DEA field, and to provide a streamlined approach to DEA and Additive model. Having the entire efficient DMUs in DEA models is an important rule. To speed up the computations of the Additive DEA model this paper uses the inverse linear programming as an alternative procedure. It proposes an alternative inverse notion-based method which is capable to determine all the efficient DMUs of the model.

Keywords—Data envelopment analysis (DEA), Inverse linear programming

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