MARTIN BOĎA

Matej Bel University in Banská Bystrica, Faculty of Economics, Slovakia

EMÍLIA ZIMKOVÁ

Matej Bel University in Banská Bystrica, Faculty of Economics, Slovakia

HOW NON-RADIALITY MATTERS – PARETO-KOOPMANS TECHNICAL EFFICIENCY IN PRODUCTION OF BRANCHES OF A SLOVAK COMMERCIAL BANK

Abstract:

The purpose of the paper is to point to usability of data envelopment analysis (DEA) for technical efficiency assessment of bank branches. The paper addresses the issue of choosing a technical efficiency measure most comprehensive and informative and makes a comparison between the Pareto-Koopmans measure and the hyperbolic Debreu-Farrell measure. By way of both theoretical argumentation and empirical demonstration, the paper shows that technical efficiency measurement in DEA should be based on non-radial measures rather than radial measures that are conventionally used in DEA applications. In addition, the paper justifies the choice of a specific DEA model suitable for technical efficiency measurement of bank branches.

Keywords:

data envelopment analysis; technical efficiency; the Pareto-Koopmans measure; the hyperbolic Debreu-Farrell measure; bank branches.

JEL Classification: C44, G21