Accepted Manuscript

Aggregation of scale efficiency

Valentin Zelenyuk

PII: S0377-2217(14)00541-4

DOI: http://dx.doi.org/10.1016/j.ejor.2014.06.038

Reference: EOR 12382

To appear in: European Journal of Operational Research

Received Date: 3 October 2013 Accepted Date: 25 June 2014



Please cite this article as: Zelenyuk, V., Aggregation of scale efficiency, *European Journal of Operational Research* (2014), doi: http://dx.doi.org/10.1016/j.ejor.2014.06.038

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Aggregation of Scale Efficiency

Valentin Zelenyuk*

Last update: 14 March 2014

Abstract

In this article we generalize the aggregation theory in efficiency and productivity analysis by deriving solutions to the problem of aggregation of individual scale efficiency measures, primal and dual, into aggregate primal and dual scale efficiency measures of a group (e.g., industry). The new aggregation result is coherent with aggregation framework and solutions that were earlier derived for other related efficiency measures and can be used in practice for estimation of scale efficiency of an industry or other groups of firms within it.

Keywords: Scale Efficiency, Aggregation, Industry Efficiency, Duality, DEA.

JEL Classification: D24, C43, L25

^{*}School of Economics and Centre for Efficiency and Productivity Analysis (CEPA) at The University of Queensland, Australia; *address*: 530, Colin Clark Building (39), St Lucia, Brisbane, Qld 4072, AUSTRALIA; e-mail: v.zelenyuk@uq.edu.au; tel: + 61 7 3346 7054; The author thanks the editor and the anonymous referees for the very fruitful comments and suggestions—they helped improving the paper substantially.

Download English Version:

https://daneshyari.com/en/article/6897212

Download Persian Version:

https://daneshyari.com/article/6897212

<u>Daneshyari.com</u>