Abstract

Title: Evaluation of efficiency of professional football clubs

Objectives: The aim of this thesis is to identify the efficiency of English Premier League football clubs in the 2015/16 to 2018/19 seasons using two selected data envelopment analysis models and compare the results. Subsequently, to define what optimisation of inputs and outputs would lead to maximum efficiency.

Methods: The method of data envelopment analysis, based on linear programming, was used to determine the effectiveness. There were chosen two approaches to this method, each with a different set of inputs and outputs, both assuming variable returns to scale and focusing on inputs.

Results: Two clubs were identified as being maximally effective throughout the whole period. Some relegated clubs were also rated as 100% efficient. The optimization of the variables primarily proposed a reduction of inputs.

Keywords: football, efficiency, data envelopment analysis, decision making unit, DEA-BCC