Bank branch efficiency evaluation by means of least absolute deviations and DEA 🛒

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Purpose

The purpose of this paper is to assess the efficiency of individual branches of a large Greek bank through the application of both goal programming (GP) and data envelopment analysis (DEA).

Design/methodology/approach

The paper employs a particular least absolute deviations (LAD) technique (i.e. a special case of GP/constrained regression) and DEA as two performance measurement methods. The performance evaluation by means of GP is assessed utilizing two alternative conceptual (parametric functional form-loglinear) models: one focusing on transaction and one on production efficiency. The DEA assessment using the transaction efficiency model is performed under the specifications of constant or variable returns to scale.

Findings

The two methods do provide confirmation of each other's findings. The results support the main claim that there is a strong relationship between the rankings obtained by GP and DEA. Moreover, the GP results indicate that there is a relationship between bank branch transaction and production efficiency.

Practical implications

The results may be of interest to stakeholder groups such as bank shareholders, managers, and regulatory authorities.

Originality/value

The paper is believed to be the first to examine the application of GP and DEA to measure the efficient use of resources of bank branches in Greece in terms of location (urban-rural).

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