

**Evaluate the performance of banking sector in Pakistan with
approach of Data Envelopment Analysis.**

By

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the degree of MS Finance

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DEDICATION

This dissertation is dedicated to my parents for their love and support.

Glossary Terms:

Data Envelopment Analysis (DEA)

It is a non-parametric quantitative model which employed for measuring the relative efficiencies of DMU's, it was first put forward by Charnes, Cooper and Rhodes in 1978.

(Efficiency = weighted sum of outputs / weighted sum of inputs).

Decision Making Units (DMUs)

They are the economic entities or units whose efficiencies will be measured by the model, in this study these are banks. Those units should be homogeneous, work in the same field and have the same inputs and outputs variables.

Economic Efficiency

It means, producing the maximum value of output with a given value of inputs; or equivalently, using minimum value of inputs to produce a given value of output.

Efficiency

The DMU ability to produce the maximum amount of output with a given amount of inputs; or equivalently, using minimum amount of inputs to produce a given amount of output. The DMU is considered efficient if performances of other DMUs do not show that some of its inputs or outputs can be improved without worsening other inputs or outputs.

Abstract

This study measures the relative efficiency of 21 commercial banks in Pakistan for the period of 2009-2014 with an integrated approach includes Data Envelopment Analysis. It uses four inputs (deposits, interest expense, non-interest expense and number of branch) and three outputs (total loans, interest income and non-interest income) in terms of production approach. According to empirical result, state-owned commercial banks are efficient in data envelopment analysis model. However, foreign-owned commercial banks have overall lower efficiency scores than government owned and higher than private owned commercial banks. The results also suggest that inefficient banks should especially improve their loans and should focus on their expenditure. Moreover, more than half of the commercial banks are scale efficiency. The results of the study may be useful for the bank managers in assessing their performance.

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