

# Scale Efficiency: An Empirical Study of Public and Private Sector Banks in India

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## ABSTRACT

In the present study attempt is made to analyse the scale efficiency of public and private sector banks under the constant return to scale assumption. Scale efficiency is defined as the ratio of technical efficiency (CRS) to the technical efficiency (VRS). DEA (Data Envelopment Analysis) model is used for the purpose of doing analysis. Among the two approaches production approach and intermediation approach, intermediation approach is applied in the study. In the intermediation approach the exact set of inputs and outputs variables depends upon the availability of data. The output oriented model is used in the study. In output approach, if one is considering to avoid wastage by using as little input as output production allows, i.e. we evaluate the ability to maximize output by keeping input fixed. The input variables of the study are branches, employees, interest expenditure and deposits. The output variables in the study are advances, interest income, non-interest income and investment. The scale efficiency and scale inefficiency (in percentage) at individual and group level of thirty two banks (sixteen public and sixteen private sector banks) is being analysed in the study. The analysis predicts that the average scale efficiency of private sector banks (0.980) is greater than the public sector banks (0.972). This indicates that the average scale efficiency of public and private sector banks are not 100% scale efficient. Furthermore, the IDBI Bank among public sector banks and Axis Bank under private sector banks has average scale efficiency 100%. The IDBI Bank and Axis Bank is followed by HDFC Bank (99.90%) and ICICI Bank (99.80%) in terms of average scale efficiency.

**Keywords:** Scale Efficiency, DEA (*Data Envelopment Analysis*), Public and Private Sector Banks, Second Reform Phase

