Efficiency of Gulf Cooperation Council Banks: Empirical evidence using Data Envelopment Analysis

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ABSTRACT

This paper investigates the efficiency level of Gulf Cooperation Council (GCC) banks on technical efficiency (TE), pure technical efficiency (PTE) and scale efficiency (SE). Both PTE and SE represent the potential factors that influence the efficiency of the GCC banks. There are 43 GCC banks observed in this study over the period 2007 until 2011.

The Data Envelopment Analysis (DEA), a non-parametric method using variable returns to scale (VRTS) under Banker, Charnes, and Cooper (BCC) model, was used with assets and deposits (as input) and loan and income (as output).

On average, the results show that GCC Banks are operating with an optimal scale of operating. Nevertheless the results were contaminated by the managerial inefficiency to utilise the recourses although the technical efficiency (TE) or managerial efficiency increased in 2011 to 83.6%. Furthermore, the results indicate that while the larger banks (the 22 largest) tend to operate at constant returns to scale (CRS) or decreasing returns to scale (DRS), the smaller banks (the 21 smallest) were susceptible to operate at either CRS or increasing returns to scale (IRS).

Keywords: GCC banks, technical efficiency, pure technical efficiency, scale efficiency.