

Abstract

This Ph.D. thesis addresses issues pertaining to the assessment of efficiency and productivity in the Swedish banking sector. It consists of an introduction and three self-contained papers.

Paper I: “Effects of Deregulation and Banking Crisis on the Labour Use Efficiency in the Swedish Banking Industry”

This paper analyses the impact of the deregulation and the subsequent banking crisis on the efficiency of labour in the Swedish banking sector. A translog stochastic frontier model is adopted in order to estimate the labour input requirement function and to assess bank technical efficiency. Furthermore, the parameters of the stochastic frontier function are simultaneously estimated with the parameters of a model for the technical inefficiency effects. The analysis suggests that there is capacity for substantial labour efficiency improvements in the Swedish banking industry. It is also shown that deregulation positively affected productivity growth. However, no such positive impact was found on labour use efficiency. In addition, the banking crisis affected the efficiency of labour utilization in Swedish banks in a negative way, considering the involved outputs and inputs.

Paper II: “Assessing the Efficiency Effects of Bank Mergers in Sweden: A panel-based Stochastic Frontier Analysis”

It is often argued that bank consolidation waves generate substantial efficiency gains associated with reduced operating costs, enhanced diversification of risks, and better management quality. This paper aims at assessing the efficiency effects of bank mergers in Sweden utilizing an unbalanced panel of savings banks for the period 1984 to 2002. A frontier cost function with a time-varying stochastic efficiency term is estimated in order to find empirical support for an efficiency-enhancing role of bank mergers. The results suggest that there is no strong evidence in favour of the hypothesis that inefficient banks are likely to be acquired by more efficient ones. Furthermore, the post-merger analysis shows no remarkable improvements in bank technical efficiency after consolidation. These findings imply that decision-makers ought to be more cautious in promoting mergers as a means to enjoying efficiency gains.

Paper III: “Decomposing Efficiency and Productivity in Swedish Banking: An Empirical Investigation”

The fast pace of changes in the economic environment and the increasing globalization of financial services dictate an increase in the awareness of the financial institutions with respect to their economic performance. This paper investigates the efficiency and productivity of Swedish banks during a five-year period from 1998-2002. Furthermore, these measures of bank performance are decomposed into their respective components and their development over time is analysed. In addition, a second-stage regression analysis is conducted in order to determine whether certain specific factors have any effect on efficiency. The results indicate that the overall cost efficiency in the Swedish banking sector averages at 79 percent. The major source of inefficiency appears to be technical in nature rather than allocative while scale inefficiency is estimated to be relatively small. Swedish banks have on average experienced a productivity progress of 6.5 percent attributed largely to industry productivity gains. Furthermore, larger and more profitable banks display higher levels of efficiency whereas the number of branches has a negative effect.

Key words: Technical efficiency; Banking industry; Financial deregulation; Productivity; Mergers and acquisitions; Frontier cost functions; Data envelopment analysis.

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