

台灣養豬戶之效率與生產力變動分析：以連續記帳戶樣本為例

陳柏琪, 黃玉鴻, 許聖民, 張靜貞

國際企業學系

管理學院

pochi@chu.edu.tw

摘要

In order to explore the performances of Taiwan's hog production, the approaches of Data Envelopment Analysis (DEA) and Malmquist Index are adopted to evaluate the cost efficiency and total factor productivity change of 29 hog farms participating in the record-keeping program in Taiwan over the three year interval. Empirical results show that the cost efficiency of these farms has improved over time, but can be improved by 18.65% on average. The decomposition results indicate that the pure technical efficiency performed the worst. The second stage regression results indicate that technical assistance and scale expansions are beneficial to the pure technical and scale efficiency performance. The Malmquist Index results further indicate that the major source of productivity growth is technical efficiency improvement rather than technological progress. Therefore, how to upgrade the structure and performance of hog operation has important implications for the industry as well as the public policy makers.

關鍵字：DEA, Cost Efficiency, Malmquist Productivity Index, Hog Farm