## 台灣地區農會經營績效之評估-多部門資料包絡法之應用 陳柏琪,張靜貞,游明敏,徐世勳 國際企業學系 管理學院 pochi@chu. edu. tw

## 摘要

Taiwan's farmers' associations are characterized as general purpose, multiservice farmers' cooperatives with credit, extension, insurance, and marketing departments. This study modifies the multi-activity DEA model by Mar Molinero (1996) to evaluate the efficiency of individual departments when allocation of shared inputs (such as employees and fixed capital) among the four departments is unclear. In particular, due to the risk of non-performing loans faced by the credit department, the directional graph distance function is adopted in our study to provide a risk-adjusted performance measure. It is found that the performance of marketing and credit departments are in general much better than those of the extension and insurance departments. In addition, there are close ties among the efficiencies of the four departments. Thus, our result implies that farmers' associations should strengthen their extension services and enhance grassroots connections to improve their overall performance.

關鍵字:multi-activity DEA, shared inputs, directional distance function, undesirable outputs