

## 摘要

本研究採用資料包絡分析法球員效率與 NBA 官方網站效率值來探討其對球員薪資之關聯性。本研究除探討外籍球員與美國籍球員間效率及高薪球員與低薪球員間效率差異，並同時比較資料包絡分析法(DEA)所計算之效率值與 NBA 官方網站所提供之效率值何者與薪資之關聯性較高。

實證結果發現，外籍球員與美國籍球員效率無顯著差異；但是高薪球員的效率顯著的優於低薪球員。另外也發現薪資與國籍間之關聯，及國籍與效率間之關聯性並不顯著。最後，在 Vuong test 比較資料包絡分析法之效率與 NBA 效率值與球員薪資間之關聯性的測試，雖然兩類效率值前期與薪資之關聯性都成正相關，但是 DEA 所計算之前一期效率值高於 NBA 官網之前一期效率值與薪資關聯性，顯示 DEA 所計算之效率值可以比官網之效率值更能做為球員薪資談判之指標。

**關鍵詞：**資料包絡分析法、美國職業籃球聯盟外籍球員、球員效率與薪資



## **Abstract**

This research applies Data Envelopment Analysis and examines the relationship between NBA players' salaries paid and efficiency performance. The research not only compares the efficiency difference between players paid for different salaries, Local players and Foreign players, but also construct a model to examine the explanatory ability about player's salaries between DEA efficiency scores and NBA official efficiency scores.

The empirical results suggest that there is no difference between the local players and the foreign players, but the efficiency performance of high-paid players is better than the low-paid players. After we controlled the other variables, the empirical results illustrated that player's nationality and salaries has no significant influence in player's efficiency. The Vuong test results reveal that the pervious period DEA efficiency score demonstrated a higher explanatory ability than the pervious period NBA official efficiency score. The finding suggests that the DEA efficient approach could be a better index for players' salaries negotiation than NBA official efficiency score.

**Key word** : Data Envelopment Analysis; Foreign NBA Player; Efficiency and Salaries

