摘要

近年來全球環保意識逐漸抬頭，環境保護議題備受重視，而政府環保工作績效是環境管理的重要一環。因此本研究運用情境相依資料包絡分析法（Context-Dependent DEA），探討台灣 22 個縣市 2013 至 2017 年的資源回收效率，並區分出不同效率層級以進行績效比較改進。

研究結果發現，不論從五年長期觀點或是 2017 年現況的觀點來看，在效率層級、相對吸引力、相對進步值上，分析結果為一致的。資源回收績效較好的縣市有嘉義市、臺南市、高雄市，其中以嘉義市為首，而離島縣市的資源回收效率較差。在麥氏生產力指數部分，研究結果得知五年間 22 個縣市的資源回收生產力有 2.07% 的進步，其中苗栗縣為改善最多的縣市。但原為回收效率最好的嘉義市，其生產力卻較為落後，其原因為將投入有效轉換為產出的技術退步，進而影響生產力，未來應優先改善其生產技術。相反的，金門縣與澎湖縣，生產力卻名列前茅，其原因則是相對技術效率的進步造成生產力進步，因此雖然它們在 2017 年的效率層次、相對吸引力、相對進步值仍然位於落後位置，但只要持續改進技術效率，應可在眾多縣市中晉升至較高效率層級。

關鍵字：情境相依、資料包絡分析法、資源回收、績效評估

Abstract

In recent years, global environmental awareness has gradually risen, and environmental protection issues have received much attention. The performance of government environmental protection work is an important part of environmental management. Therefore, this thesis uses Context-Dependent Data Envelopment Analysis to explore the resource recovery efficiency of Taiwan's 22 counties and cities from 2013 to 2017, and to distinguish different efficiency levels for performance improvement.

The conclusions of the thesis found that, regardless of the long-term perspective of five years or the current situation in 2017, the results of the analysis were consistent at the efficiency level, relative attractiveness, and relative progress value. The counties and cities with good resource recovery performance include Chiayi City, Tainan City, and Kaohsiung City, and Chiayi City is the head, and the resource recovery efficiency of the offshore islands is relatively poor.

In the Malmquist Productivity Index, the research results show that the resource recycling productivity of 22 counties and cities in the five years has improved by 2.07%, and Miaoli County is the most improved county. However, Chiayi City has the best recycling efficiency, its productivity is relatively backward. The reason is the technology that effectively converts input into output will be degraded, which will affect productivity. In the future, it should be priority given to improving its production technology. Conversely, Jinmen County and Penghu County are the best in productivity, because the advancement in technological efficiency has led to productivity improvements. Although they are still lagging behind in terms of efficiency level, relative attractiveness and relative progress in 2017, as long as they continue to improve technical efficiency, and they should be promoted to higher efficiency levels in many counties and cities.

Keywords: Context-Dependent, Data Envelopment Analysis, Resource Recycling, Performance Evaluation