

摘要

近代地球遭遇氣候變遷，全球各地天災、汙染層出不窮，導致人們環保意識抬頭，CSR(Corporate Social Responsibility)的概念浮現。隨著此概念的興起，企業開始展現對 ESG(Environmental, Social and Governance)的高度重視，而 ESG 的評分也成為社會大眾檢視企業是否落實社會責任的一種方法，使得企業愈加重視自身 ESG 的評分。

臺灣的資訊科技產業對於本國，乃至世界，都扮演著至關重要的角色，而即便擁有這般影響力，卻也同樣面臨汙染問題。不論是為了承擔社會責任，或是為了因應詭譎的氣候，做好風險管理，越來越多的企業投入將 ESG 納入經營過程的考量之中。不少學者展開對 ESG 和經營績效的關聯性研究，卻鮮少以資訊科技業為研究對象，因此本研究將以我國資訊科技業為例，探討 ESG 和經營績效的關聯性。

本研究將藉由 Network DEA 模式以及 Tobit 迴歸模型，評估臺灣資訊科技產業的市場力效率、獲利力效率以及總體效率，再進一步分析該產業 ESG 各構面分數與其經營績效之關聯性。本研究實證結果顯示，在資訊科技產業中，消費性電子、PC 系統、半導體、其他分類等子產業於經營績效中的表現相對來說屬於優良，位於效率分佈圖的第一象限，而電子零組件、光電/IO、通訊設備、網路設備等子產業則需付出更多的努力，位於效率分佈圖上的第三象限。另一方面，迴歸分析結果顯示，環境評分(E)的分數與整體經營績效呈現顯著負相關；社會評分(S)的分數與整體經營績效呈現正相關；治理評分(G)的分數與整體經營績效呈現正相關。

期待本研究能對資訊科技業的 ESG 議題做出貢獻，起到承先啟後之作用，並可藉此提升企業對於經營績效的理解以及增進對 ESG 評分的認識，使企業意識到致力 ESG 推動所帶來的影響力，間接協助企業邁向永續經營。

關鍵詞：ESG、經營績效、資訊科技業、Network DEA、Tobit 迴歸

ABSTRACT

In modern times, the Earth is facing climate change, natural disasters and pollutions. Has led to the rise of people's environmental awareness. The emergence of the concept of CSR (Corporate Social Responsibility). With the rise of this concept, companies have begun to show great importance to ESG (Environmental, Social and Governance), and ESG scores have become a way for the public to review whether companies have implemented social responsibilities. Making companies pay more and more attention to their own ESG scores.

Taiwan's information technology industry plays a vital role for the country and even the world. Even with such influence, it still faces pollution problems. Whether it is to fulfill social responsibilities or to cope with the treacherous climate, to do a good job in risk management. More and more companies are incorporating ESG into their business processes. Many scholars have also conducted research on the correlation between ESG and business performance. But there are few literature focusing on Taiwan's information technology industry. Therefore, this study will take my country's information technology industry as an example to explore the correlation between ESG and business performance.

This study used the Network DEA model and Tobit regression model to evaluate the market efficiency, profitability efficiency and overall efficiency of Taiwan's information technology industry, and analyze the correlation between the ESG aspects scores of the industry and its operating performance. The empirical results of this study show that in the information technology industry, other sub-industries such as consumer electronics, PC systems, semiconductors and other sub-industries perform relatively well in terms of operating performance and are located in the first quadrant of the efficiency distribution diagram. Sub-industries such as electronic components, optoelectronics/IO, communication equipment, and network equipment require more efforts and are located in the third quadrant of the efficiency distribution map. On the other hand, the regression

analysis results show that the score of E has a significant negative correlation with the firm performance. The score of S has a positive correlation with the firm performance. The score of G has a positive correlation with the firm performance.

Through the results of this study, we hope to make a contribution to this research topic, provide experience for subsequent scholars, to be a connection between the past and the future. And the results could be used to enhance companies' understanding of social responsibility and enhance their understanding of ESG scoring. So that companies can aware of its influence, we hope to help companies move towards sustainable management.

