

關鍵詞：固本精進、產學合作、科學園區、科技政策、創新

Abstract: To enhance the development of high-tech industry, Hsinchu Science Park is constructed for integration of research and development and innovation of manufacturing in 1980. However, the overall sales of science parks in Taiwan were declined violently due to 2008 global financial crisis. The impact leads to dramatic reduction of CAPEX (capital expenditure) and technology development, while some companies had to lay off some employees and apply unpaid leave for cost reduction. In particular, most of talents with higher education are still in academia who need more opportunities to contribute their knowledge and technology for enhancing industry competitiveness. Therefore, administrations apply policy of science and technology through improvement in university-industry collaboration to foster the industry transformation and integrate the function of Science Park and university to sustain the research investments and improve the overall competitiveness in industry. This study aims to propose framework of university-industry collaboration through investigating the existing cooperation between university and industry and identifying the potential difficulties. To validate the proposed framework, an empirical study is applied by the program of university-industry collaboration of enhancing sustainable growth for NSC (National Science Council) Science Park. The results demonstrate the practical viability and provide a basis of policy of science and technology for innovation and university-industry collaboration in the future.

Keywords: Sustainable Growth, University-Industry Collaboration, Science Park, Policy of Science and Technology, Innovation

1. 前言

因應全球國際化與知識創新的產業發展趨勢，臺灣面臨結構性的轉型需求，過去臺灣一向以製造代工為主，雖然在全球產品供應鏈中扮演舉足輕重的角色，但亦相對缺乏對產品創新和前瞻技術研發的投入，尤其臺灣企業以中小企業為主體，企業規模上無法與國際大廠相比，研發支出與研發深度不足，因此政府藉由各項科技政策的實施與科技計畫的支援，營造產業界與學術界產學合作的研發創新環境，期望將學術界龐大的人力資源能釋放到產業界，共同進行創新與研發，提升企業與國家的整體競爭力（許文秀，民 91；許文秀、張保隆，民 89；經濟部，民 95；Lin, 2003）。

臺灣的產業從過去勞力密集的輕工業轉型為資本技術密集之高科技及高附加價值工業，政府為了因應產業的發展需求，整合研發機構、學術機構以及產業的資源與能量，營造結合研發