

摘要

在我國整體創新活動中，公共研究機構扮演重要的角色。政府過去多項科技政策，常以經費補助公共研究機構進行研究，進而發展出新知識及技術，再過透過成果轉化或輔導產業廠商進行技術創新，推動產業轉型與升級，如財團法人工業技術研究院之於半導體產業，資訊工業策進會之於資通訊產業。為了解我國科技政策補助對於公共研究機構創新表現的影響以及影響其計畫研究成果的轉化因素。本研究以我國公共研究機構，包括由公共部門捐助之非營利財團法人或是政府部門所屬研究機構為探討對象，以 GRB 資料作為政府科技政策補助與執行的計畫樣本，並比對專利作為後續創新活動轉化之成果。在組織層次，研究結果顯示公共研究機構研究人員、以基礎研究計畫為主與技術積累對其創新產出與產研合作有正向顯著影響，對不同經費來源、其他不同性質的研究對其績效並無差異，顯示公共研究機構運作的績效受其組織定位與特徵影響較深與政府委託執行科技計畫類型無關。在計畫層次，經濟部與科技部計畫、自行提案計畫與非基礎研究計畫對於成果轉化技術與技術成熟度有正向影響，充分表現公共研究機構在政府科技政策執行所扮演的角色。整體而言，公共研究機構的組織能耐與自身的定位與特徵有關，對於政府產業相關的科技計畫，公共研究機構確實能夠扮演好其角色，進行產業技術的成果轉化與橋接新興科技。

關鍵詞: 公共研究機構、政府科研計畫、技術產出、產研合作

Abstract

Public research organizations (PROs) play an influential role in national innovation. In the past, various governments' S&T policies have often subsidized PROs to develop new knowledge and technologies through research projects and then promote the commercialization of results and transfer to industrial firms. Therefore, this study is aimed to examine the impact of the government's research grants on the innovation performance of PROs and the factors that affect the conversion of their results. In the empirical study, non-profit and government PROs were employed as the sample, GRB data were used as the policy subsidies and implementation, and patent filings were used as the results of subsequent conversion. At the organizational level, the results show that the research staff, the predominance of basic research, and the accumulation of technology in PROs positively impact their innovation outcome and collaboration with the industrial firms. However, there is no difference in performance across funding sources and different types of research. At the project level, the MOE and MOST projects, self-proposed projects, and non-basic research projects positively contribute to technology conversion and technology readiness. It demonstrates the role of PROs as an intermediary of government S&T policy. In general, the organizational capacity of PROs is related to their positioning and characteristics. PROs indeed play their role well in converting industrial technologies and bridging emerging technologies for government industrial-related technology programs.

Keywords: Public research organizations, Government Research Bulletin, Technological outcome, Industry-Research institution collaboration