

產業聚集與廠商研發活動之研究 ——台灣電子業廠商之驗證

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本文利用 1992-2000 年間電子廠商的資料，探討廠商的勞動聚集與研發聚集與其研發活動的關聯性。衡量聚集指標時，參考 Busch and Reinhardt (1999) 的方式，並考慮廠商間的距離，來衡量廠商的聚集程度，結果發現水平產業的研發聚集程度較勞動的聚集程度大；垂直產業的研發聚集程度與勞動聚集程度則大致較接近。無論是水平或垂直產業的勞動或研發聚集程度，均對廠商研發活動有正效果；研發活動本身亦對水平產業的廠商與垂直產業的廠商有外溢效果。此外亦驗證不同區域的特性對研發有顯著的差異影響。

關鍵字：勞動聚集、研發聚集、研發活動、電子產業

Industrial Agglomeration and R&D Activities: The Evidence from Taiwan's Electronics Firms

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ABSTRACT

Using 1992-2000 data on electronics manufacturers, this paper aims to investigate the relationship between the two types of agglomeration—labor and R&D agglomeration—and R&D activities. The measurement of agglomeration is primarily based on Busch and Reinhardt's method (1999). In addition, distance between manufacturers is also integrated into the measurement. Empirical results show that among the manufacturers in a horizontally-related industry, their R&D agglomeration is greater than their labor agglomeration. In comparison with other manufacturers, i.e. those in a vertically-related industry, no significant difference in the degree of the two agglomerations is observed. The two types of agglomeration in a horizontally-related industry and vertically-related industry both have a positive effect on R&D activities for the electronics industry. The R&D activities themselves have vertical and horizontal spillover effects. In addition, empirical results also point out that regional differences have a significant impact on R&D activities.

Key Words: labor agglomeration, R&D agglomeration, R&D activities, electronics industry