

行政院國家科學委員會專題研究計畫成果報告

台灣產業推動電子商務之整合研究:考量企業生命週期與產業競爭變數之智慧財產權評價研究

Exploring the Value of Firms' Intellectual Property Rights for Differential Product Life Cycle Stages and Differential Intensity of Competition

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一、中文摘要

本研究探討在不同的生命週期階段，資本市場對各期企業經核准專利權數是否有不同評價；本文同時探討民國八十三年專利法大修前後，市場對於擁有專利權數不等的公司，其所認定價值是否不同；復檢測生命週期、法規大修、與專利權之間是否存在交互的加項效果；最後觀察專利權數的多寡是否會影響到公司的股權集中度。本文使用 Anthony and Ramesh (1992)的方法尋求生命週期的替代變數。實證結果發現，專利權與股價之間呈現顯著的正向關係，考慮不同的生命週期階段後，發現成長期的總專利權數對於股價的影響大於成熟期及衰退期。專利法法規大修以後，擁有愈多(沒有)專利權的公司，股價愈高(低)，且法規大修後，處在成長期的公司，每一個專利權的邊際價值高於其他各組。最後，專利權愈多的公司，股權有愈集中的現象。

關鍵詞：專利權；企業生命週期；專利法規。

Abstract

The objective of this study is to explore whether the market response to patent would differ during differential stages in a firm's life cycle. We partitioned our samples into various life cycle portfolios based on methods developed by Anthony and Ramesh (1992) in order to test the hypothesis that the earnings response coefficients of firms' patent would be greater for the growth as

opposed to the stagnant portfolios. Consistently, we documents that a montonic decline in the response coefficients of patent from the growth to the stagnant stages. Furthermore, the findings also indicate that the investors value positively (negatively) for firms with more patent (without patent) after the enforcement of new patent regulation. Finally, firms with greater concentration in ownership appear to be with more patent..

Keywords: patent ; firm life cycle ; patent rule.

二、緣由與目的

本研究旨在探討智慧財產局公告的專利權數量，在不同生命週期階段下，是否具有不同的價值攸關性。同時也探究專利法大修對於此價值攸關性的影響。其次更想瞭解專利權愈多者，內部人持股數是否也愈多。

本研究探討下列幾項重要主題：

- (一) 在成長期，資本市場對於專利權有較高的評價，而在衰退期時期，此一評價是否較低。
- (二) 專利權法的大修，對擁有專利權數

不同的公司而言，會產生不同的影響。特別是大修之後，對於專利權較多者，且處於成長期者，更具有正向的加分效果？

(三) 專利權數量愈多者，由於內部人較為瞭解，因而股權集中度也會比較大？

三、研究假設及樣本選取與資訊蒐集

1 在成長期（衰退期），資本市場對於專利權有較高（較低）的評價。

2 專利權法的大修，對於擁有專利權不同的公司而言，會產生不同的影響。

3 股權集中度與專利權數量呈現正相關。

本文研究樣本為八十年至八十九年之曆年制上市公司為研究對象，樣本公司之各項財務資料，取自「台灣經濟新報社(TEJ)」之一般產業財務資料檔。樣本公司之各項專利權數統計資料，取自財團法人亞太智慧財產基金會之「中華民國專利權資料庫」。

基於本研究目的，取樣尚需符合下列樣標準：選取標準為：1 樣本期間有研究所須之財務資料與股價資料的上市公司。2 金融保險業行業性質特殊，財務資料結構與一般行業不同，再加上其相關政策及會計制度需遵照財政部指示¹，故將之排除於觀察樣本外。

四、實證研究結果與討論

¹ 我國商業銀行要定期分別向財政部金融局、中央銀行、存款保險公司、證期會等監理機構，申報「營運資料摘要」、「存放款利率」、「逾放比率」、「銀行法相關規定比率分析表」等各種會計與統計報表，其業務受到比較多的管制。

根據實證研究結果發現：

(一) 專利權與股價之間呈現顯著的正向關係，

(二) 處在生命週期成長階段的公司，進行專利權所產生的未來效益，資本市場會給予比較高的評價；相對的，處在生命週期衰退階段的公司，資本市場對於其專利權所產生的未來效益，給予比較低的評價。

(三) 專利法法規大修以後，擁有愈多(沒有)專利權的公司，股價愈高(低)，且法規大修後、處在成長期的公司，每一個專利權的邊際價值高於其他各組。

(四) 最後，專利權愈多的公司，股權有愈集中的現象。換言之，當樣本公司的專利權愈多時，由於大股東擁有較多的公司內部的訊息，因而愈惜售公司的股票，或是欲會買回公司的股份，而形成股權愈來愈集中的現象。

本研究結果與我們一般認知有些許差異，可供各界作參考，及未來研究深入地探討。

五、計畫成果自評

(一) 本文是首篇探討在不同生命週期的各階段下，使用非財務資料的智慧財產權(即專利權)數據，以檢測企業價值攸關性的文獻，而與使用傳統財務資訊(如廣告之生命週期)有所不同(林修葳,2001)。因此對於目前方興未艾的無形資產、非財務資訊與價攸關性的文獻，兩方面都具有貢獻，相對的，目前雖有部分文獻開始探討非財務資訊的價值攸關性，但甚少研究進一步探討到非財務性資訊在不同生命週期階段的價值攸關性。

(二) 本文探討專利權立法規範修正，對於股價攸關性的影響，由於此為我國特有

的情境，因此分析結果相當有趣，而可以補足國外文獻之闕如。

(三)財務報表上的專利權數字或會引發會計資訊不對稱，本文使用非財務資訊以探討其在降低此一不對稱的功能，進而檢測因為此一非財務資訊所引起的內部人持股的訊息傳遞效果。此一研究結合非財務資訊、會計性資訊不對稱、與進一步的降低此一不對稱的方法。此一議題為原創性。

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