

The Determinants of Capital Structure: Evidence from Taiwan Lodging Companies

王玲茹、梁晉嘉

E-mail: 371611@mail.dyu.edu.tw

ABSTRACT

This study uses a dynamic panel data model to examine empirically how some financial factors affect the capital structure of Taiwan lodging companies. The quarterly data on Taiwan Economic Journal databank (TEJ) run from year 2000 to 2011. After deleting missing data the effective sample covers 8 companies and 384 observations in the study. With debt ratio being the explained variable, the key financial variables consist of profitability, firm size, tangibility, growth opportunities, effective tax rates, non-debt tax shields. The empirical results are as follows. Profitability has a significantly negative influence on debt ratio whereas growth opportunities are significantly and positively related to debt ratio, which thus confirms the argument of the pecking order theory. On the other hand, effective tax rates affect positively debt ratio, which is consistent with the trade-off theory.

Keywords : Dynamic panel data model、capital structure、Pecking Order Theory、Static Trade-off Theory

Table of Contents

中文摘要.....	iii	英文摘要.....	iv
誌謝.....	v	內容目錄.....	vi 表
目錄.....	vii	圖目錄.....	viii 第
第一章 緒論	1	第一節 研究背景與動機	1 第二節
研究目的	4	第三節 研究架構與流程	5 第二章 資本
結構理論及文獻回顧	7	第一節 資本結構相關文獻回顧	7 第二節 資本結構
決定因素	27	第三章 研究模型與方法.....	36 第一節 動態追蹤資
材料模型(Dynamic Panel Data Model) 36 第二節 實證模型設定.....	40	第二節 實證模型設定.....	40 第三節 研究假說.....
..... 44 第四章 實證結果與分析.....	49	第四章 實證結果與分析.....	49 第一節 敘述性統計分析.....
..... 49 第二節 Pearson相關係數分析.....	51	第二節 Pearson相關係數分析.....	51 第三節 動態追蹤資料模型分析....
..... 54 第五章 結論.....	58	第五章 結論.....	58 參考文獻.....
..... 60			

REFERENCES

- 一、中文部分: 中華民國交通部觀光局 (2002), 觀光客倍增計畫 , 臺北市:作者。來源:
http://admin.taiwan.net.tw/upload/contentFile/auser/b/doublep/do_uble.htm?no=120 中華民國交通部觀光局 (2011), 重要觀光景點建設中程計畫(101-104年) , 臺北市:作者。來源: <http://admin.taiwan.net.tw/public/public.aspx?no=116> 行政院 (2012) , 六大新興產業-觀光拔尖計畫 , 臺北市:作者。來源: <http://www.ey.gov.tw/policy9/cp.aspx?n=38B460088F2AF57E> 二、英文部分: Acaravc?, S. (2004). Gelismekte Olan Ulkelerde Sermaye Yap?s?n? Etkileyen Faktorler: Turkiye ' de Bir Uygulama. Unpublished thesis, Cukurova University, Adana. Allen, D. E. (1991). The determinants of capital structure of listed Australian companies: the financial manager ' s perspective. Australian Journal of Management, 16(2), 103-128. Andreu, R ., Claver , E ., & Quer, D . (2007). Foreign market entry mode in the hotel industry:The impact of country- and firm-specific factors, International Business Review, 16,362 – 376. Andrew, P., & Schmidgall, R. (1993). Financial Management for the Hospitality Industry, AH&MA, Washington DC . Ang, J.S. (1992). On the theory of finance for privately held firms, Journal of Small Business Finance, 1(3), 185-203. Antoniou, A., Guney, Y., & Paudyal, K. (2002). Determinants of corporate capital structure: evidence from European countries, University of Durham, Durham, working paper. Arellano, M., & Bond, S. (1991). Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations. The Review of Economic Studies, 58(2), 277-297. Arellano, M., & Bover, O. (1995). Another look at instrumental variables estimation of error-component models. Journal of Econometrics, 68, 29-51. Bancel, F., & Mittoo, U. (2004). The Determinants of Capital Structure Choice: A Survey of European Firms, SSRN working paper, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=299172 Barton, S., & Gordon, P. (1988). Corporate strategy and capital structure, Strategic Management Journal, 9(6), 623-32. Benito, A. (2003). The capital structure decisions of firms: is there a pecking order?, Banco de Espana, Madrid, The Banco de Espana working paper series, available at: Bevan, A., & Danbolt, J. (2002). Capital structure and its determinants in the UK: a decompositional analysis, Applied Financial Economics, 12,159-70. Bhaduri, S. N. (2002). Determinants of corporate borrowing: Some evidence

from the Indian corporate structure, *Journal of Economics and Finance*, 26(2), 200-215. Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel-data models. *Journal of Econometrics*, 87, 115-143. Booth, L., Aivazian, V., Kunt, A., & Maksimovic, V. (2001). Capital structures in developing countries, *Journal of Finance*, 56(1), 87-130. Brigham, E.F., & Houston, J.F. (2004). Fundamentals of Financial Management, concise 4th ed., South-Western Educational Publication, Mason, OH . <http://www.bde.es/informes/be/docs/dt0310e.pdf> Chang, X., & Dasgupta S. (2003) . Financing The Deficit: Debt Capacity, Information Asymmetry and the Debt-Equity Choice. Working Paper. Hong Kong University of Science and Technology. Chen, J. (2004). Determinants of capital structure of Chinese-listed companies, *Journal of Business Research*, 57(12), 1341-51. Dalbor, M., & Upneja, A. (2002). Factors affecting the long-term debt decision of restaurant firms, *Journal of Hospitality & Tourism Research*, 26(4), 422-32. Damodaran, A. (2000). *Investment Valuation*, John Wiley & Sons, New York, NY. DeAngelo, H., & Masulis, R.W. (1980). Optimal capital structure under corporate and personal taxation, *Journal of Financial Economics*, 8(1), 3-29. Erickson, M.S., & Trevino, R. (1994). A pecking order approach to leasing: the airline industry case, *Journal of Financial and Strategic Decisions*, 7(3), 71-81. Fattouh, B., Scaramozzino, P., & Haris, L. (2003). Capital structure in South Korea: a quantile regression approach, CEIS Tor Vergata research paper series, working paper no. 40, available at: <http://ssrn.com/abstract=474941> . Feikadis, A., & Rovolis, A. (2007). Capital structure choice in European Union: evidence from the construction industry, *Applied Financial Economics*, 17(12), 989-1002. Firth, M. (1997). The provision of nonaudit services by accounting firms to their auditclients, *Contemporary Accounting Research* 14(2) , 1-21. Frank, M.Z., & Goyal, V.K. (2003). Testing the pecking order theory of capital structure, *Journal of Financial Economics*, 67(2), 217-48. Gaud, P., Jani, E., Hoesli, M., & Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data, *European Financial Management*, 11(1), 51-69. Hall, G., Hutchinson, P., & Michaelas, N. (2000). Industry effects on the determinants of unquoted SMEs' capital structure, *International Journal of the Economics of Business*, 7(3), 297-312. Harris, M., & Raviv, A. (1991). The theory of capital structure, *Journal of Finance*, 46(1), 297-355. Haugen, R.A., & Senbet, L.W. (1986). Corporate finance and taxes: a review, *Financial Management*, 15(3), 5-21. Homaifar, G., Zietz, J., & Benkato, O. (1994). An empirical model of capital structure: some new evidence, *Journal of Business Finance and Accounting*, 21(1), 1-14. Hovakimian, A., Opler, T., & Titman, S. (2001). The Debt-equity Choice. *Journal of Financial and Quantitative Analysis*, 36(1), 1-24. Huang, S., & Song, F. (2006). The determinants of capital structure: evidence from China, *China Economic Review*, 17(1), 14-36. Jensen, M.C. (1986). Agency costs of free cash flow, corporate finance, and takeovers, *The American Economic Review*, 76(2), 323-9. Jensen, M.C., & Meckling, H.W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Management*, 3(4), 305-60. Karadeniz, E., Kandir, S. Y., Balcilar, M., & Onal, Y. B. (2009). Determinants of capital structure: evidence from Turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21(5), 594-609. Karadeniz, E. ,Kandir, S.Y. ,Iskendero?lu, O. , & Onal, Y.B. (2011). Firm Size and Capital Structure Decisions: Evidence From Turkish Lodging Companies, *International Journal of Economics and Financial Issues*, 1(1), 1-11. Kim, H., Heshmati, A. , & Aoun, D. (2006). Dynamics of capital structure : the case of Korean listed manufacturing companies, *Asian Economic Journal*, 20(3), 275-302. Krasker, W. (1986). Stock price movements in response to stock issues under asymmetric information, *Journal of Finance*, 41(1), 93-105. Kwansa, F., & Cho, M.H. (1995). Bankruptcy cost and capital structure: the significance of indirect cost, *International Journal of Hospitality Management*, 14(3/4), 339-50. Mazur, K. (2007). The determinants of capital structure choice: evidence from Polish companies, *International Advances in Economic Research*, 13(4), 495-514. Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial Policy and Capital Structure Choice in U.K. SMEs: Empirical Evidence from Company Panel Data. *Small Business Economics*, 12(2), 113-130. Modigliani, F., & Miller, M.H. (1958). The cost of capital, corporation finance and the theory of investment, *The American Economic Review*, 48(3), 261-297. Myers, S.C. (1977). Determinants of corporate borrowing, *Journal of Financial Economics*, 5(2), 147-175. Myers, S.C. (1984). The capital structure puzzle, *Journal of Finance*, 39(3), 575-592. Myers, S.C., & Majluf, N.S. (1984). Corporate financing and investment decisions when firms have information that investors do not have, *Journal of Financial Economics*, 13(2), 187-221. Narayanan, M.P. (1988). Debt versus equity under asymmetric information, *Journal of Financial and Quantitative Analysis*, 23(1), 39-51. Nickell Stephen. (1981). Biases in Dynamic Models with Fixed Effects, *Econometrica*, 49, 1417-26. Nunkoo, P. K., & Boateng, A. (2010). The empirical determinants of target capital structure and adjustment to long-run target: Evidence from Canadian firms, *Applied Economics Letters*, 17, 983 – 990. Nuri, J., & Archer, S. (2001). Target adjustment model against pecking order model of capital structure, *European Financial Management Association Annual Meeting*, Lugano, available at: www2.dse.unibo.it/bontempi/didattica/tesi/TomasoP/finance-PO&TO-NuriArcher.doc Ozer, B., & Yamak, S. (2000). Self-sustaining pattern of finance in small business: evidence from Turkey, *International Journal of Hospitality Management*, 19 , 261-273. Pandey, I.M. (2004). Capital Structure and Market Power Interaction: Evidence from Malaysia, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=322700 Phillips, P., & Sipahio?lu, M. (2004). Performance implications of capital structure: evidence from quoted UK organizations with hotel interests, *The Service Industries Journal*, 24(5), 31-51. Psillaki, M., & N. Daskalakis, (2009).Are the determinants of capital structure country or firm specific? , *Small Business Economics*, 33(3), 319 – 333 Qian, Y., Tian, Y., & Wirjanto, T.S. (2007). An Empirical Investigation into the Capital-Structure Determinants of Publicly Listed Chinese Companies: A Static Analysis, available at: www.arts.uwaterloo.ca/~twirjant Rajan, R., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data, *The Journal of Finance*, 50, 1421-1460. Say?igan, G., Karabacak, H., & Kucukkocao?lu, G. (2006). The Firm-Specific Determinants of Corporate Capital Structure: Evidence from Turkish Panel Data, available at: www.baskent.edu.tr/~gurayk/kisiselcapstrpaper.pdf Singh, A . , & Upneja, A . (2007). Extent of hedging in the US lodging industry, *Hospitality Management*, 26 ,764 – 776. Singh, A . , & Upneja, A . (2008). The determinants of the decision to use financial derivatives in the lodging industry, *Journal of Hospitality & Tourism Research*, 32(4), 423-447. Singh,

A . (2009). The relation between interest rate derivatives, debt maturity structure, and exposure in the lodging industry, *Journal of Hospitality & Tourism Research*, 33(3), 391-416. Stulz, R.M. (1990). Managerial discretion and optimal financing policies, *Journal of Financial Economics*, 26(1), 3-27. Tang, C.H., & Jang, S.S. (2007). Revisit to the determinants of capital structure: a comparison between lodging firms and software firms, *International Journal of Hospitality Management*, 26(1), 175-87. Tang, C.H., & Jang, S.S. (2009). Simultaneous impacts of international diversification and financial leverage on profitability, *Journal of Hospitality & Tourism Research*, 33(3), 347-368. Thornhill, S., Gellatly, G., & Riding, A. (2004). Growth history, knowledge intensity and capital structure in small firms, *Venture Capital*, 6(1), 73-89. Tong, G., & Green, C.J. (2005). Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies, *Applied Economics*, 37(19), 2179-89. Um, T. (2001). Determination of capital structure and prediction of bankruptcy in Korea, Cornell University, Ithaca, NY, dissertation thesis. Upneja, A., & Dalbor, M. (1999). An examination of leasing policy, tax rates and financial stability in the restaurant industry, *Journal of Hospitality & Tourism Research*, 23(1), 85-99. Upneja, A., & Dalbor, M. (2001). The choice of long-term debt in the US lodging industry, *UNLV Journal of Hospitality, Tourism and Leisure Science*, available at: http://hotel.unlv.edu/res_journalPubsArticle.html Upneja, A., & Dalbor, M. (2001). An examination of capital structure in the restaurant industry, *International Journal of Contemporary Hospitality Management*, 13(2), 54-59. Van Horne, J., & Wachowicz, J.M. (1995). *Fundamentals of Financial Management*, Prentice-Hall International Editions, Englewood Cliffs, NJ. Westgaard, S., Eidet, A. Frydenber , & Grosas, T. C. (2008). Investigating the capital structure of UK real estate companies, *Journal of Property Research*, 25(1), 61 – 87. Williamson, O. (1988). Corporate finance and corporate governance, *The Journal of Finance*, 43(3), 567-91. Wiwattanakantang, Y. (1999). An empirical study on the determinants of the capital structure of Thai firms, *Pacific-Basin Finance Journal*, 7, 371-403. Zou, H., & Xiao, Z.J. (2006). The financing behavior of listed Chinese firms, *The British Accounting Review*, 38(3), 239-58.