

Liquidity and Capital Asset Pricing

黃世瑋、陳玉芬

E-mail: 387243@mail.dyu.edu.tw

ABSTRACT

This paper investigates whether liquidity a significant factor of stock abnormal returns in Taiwan as taking the three-factor model (Fama and French, 1993) and four-factors model (Cohart ,1997) into consideration. The evidence shows that as adding Amihud ' s (2002) liquidity measure to the three-factor model, it enhances the explanatory power on abnormal returns of stocks, implying that liquidity is an important factor for asset pricing in Taiwan. However, the momentum factor has no effects on the abnormal returns of stocks in Taiwan stock market.

Keywords : asset pricing、liquidity、three-factor model、four-factor model、abnormal returns

Table of Contents

內文目錄 中文摘要 i ABSTRACT ii 誌謝辭 iii 內文目錄 iv 圖目錄 vi 表目錄 vii 第一章 緒論 1 第一節 研究背景與動機 1 第二節 研究目的 3 第三節 研究架構 3 第二章 文獻探討 5 第一節 三因子模型理論相關文獻 5 第二節 四因子模型理論相關文獻 7 第三節 流動性風險相關文獻 8 第三章 研究方法 12 第一節 投資組合與超額報酬 12 第二節 流動性因子之衡量 12 第三節 實證模型 14 第四節 研究樣本 15 第四章 實證結果 16 第一節 敘述統計與相關性分析 16 第二節 規模與淨值市價比的投資組合迴歸分析 19 第五章 結論 27 參考文獻 29 中文文獻 29 英文文獻 30 圖目錄 圖1-1 研究流程圖 4 表目錄 表1 樣本基本統計量 17 表2 變數間敘述統計表 18 表3 相關性分析表 19 表4 三因子實證結果 22 表5 四因子實證結果 23 表6 三因子+流動性(LIQ1)實證結果 24 表7 三因子+流動性(LIQ2)實證結果 25 表8 三因子+流動性(LIQ3)實證結果 26

REFERENCES

中文文獻 1. 杜幸樺(1999) , 影響臺灣股票報酬之共同因素與企業特性之研究—Fama-French三因子模式 , 動能策略與交易量因素 , 國立中山大學企業管理學系研究所碩士論文。 2. 李康豪(2011) , 台灣股市資產訂價模型與流動性溢酬之實證研究 - 以三大產業權值股為例 , 國立台灣大學經濟學系研究所碩士論文。 3. 林中天(1998) , 台灣股票市場三因子:系統風險、公司規模及淨值市價比實證研究 , 國立清華大經濟研究所碩士論文。 4. 胡星陽(1998) , 流動性對台灣股票報酬率的影響 , 中國財務學刊 , 五卷一期。 5. 陳榮昌(2002) , 台灣股票報酬之結構分析 , 國立中山大學財務管理學系研究所碩士論文。 6. 陳彥如(2007) , 台灣股票報酬四因子模型再檢定 - 分量迴歸之應用。 義守大學財務金融學系研究所碩士論文。 7. 陳俊孝(2008) , 台灣電子產業與非電子產業股票報酬四因子模型再檢定-分量迴歸之應用 , 義守大學管理研究所碩士論文。 8. 陳信宏(2012) , 中國大陸股市報酬穩定因素之研究 , 交大管理學報 , 29卷5期 , 447-463。 9. 葉雯婷(2010) , 大陸股市流動性風險是否被定價 , 世新大學財務金融學系研究所碩士論文。 10. 鄭舜仁(2004) , 探討影響股票流動性的因素 - 以時間數列橫斷面探討公司規模、股權結構與資訊不對稱 , 管理科學與統計決策。 11. 蔡坤宏(2007) , 資本資產定價之研究 - 三因子模型、財務失敗風險 , 國立雲林科技大學財務金融學系研究所碩士論文。 12. 歐新城(2010) , 系統流動性與風險定價 , 國立交通大學財務金融學系研究所碩士論文。 13. 蕭朝興、尤靜華、簡靖軒(2008) , 台灣股市的動能效應與投資人的下單策略 , 交大管理學報 , 28卷1期 , 頁131-168。 英文文獻 1. Arshanapalli, B., Coggin T. D., and Doukas. J. (1998), Multifactor asset pricing analysis of international value investment strategies. Journal of Portfolio Management 24, pp. 10-23. 2. Amihud, Y. and Mendelson, H., (1986), Asset pricing and the bid-ask spread. Journal of Financial Economics 17, pp. 223-249. 3. Chen, A. and Tu, E (2000), Factors model under firm characteristics in emerging market: a study of Taiwan stock market. Working paper, National Sun Yat-Sen University. 4. Amihud, Y. (2002), Illiquidity and stock returns: cross-section and time-series effects. Journal of Financial Markets 5, pp. 31-56. 5. Banz, R. W. (1981), The relationship between return and market value of common stocks. Journal of Financial Economics 9, pp.3-18. 6. Carhart, M. M. (1997), On persistence in mutual fund performance. Journal of Finance 52, pp. 57-82. 7. Chordia, R. and Subrahmanyam A. (2000), Commonality in liquidity. Journal of Financial Economics 56, pp. 3-28. 8. Fama, E. and French. K. (1992), Common risk factors in the returns on stocks and bonds. Journal of Financial Economics 33, pp. 3-56. 9. Fant, L. F and Peterson, D. R. (1995), The effect of size, book-to-market equity, prior returns, and beta on stock returns: January versus the remainder of the year. Journal of Financial Research 33, pp. 3-56. 10. Fama, E. and French, K. R. (1988), Permanent and temporary components of stock price. Journal of Political Economy 96, pp. 246-273. 11. Garbade, K. D, and Silber, W. L. (1979), Structural organization of secondary markets: clearing frequency, dealer activity and liquidity. Journal of Finance 34, pp.557-593. 12. Lee, J., S. Lin, W. Lee, and Tsao, C. (2006), Common factors in liquidity: evidence from Taiwan ' s OTC stock market. International Review of Financial Analysis 15, pp. 306-327. 13. Lintner, J. (1965), The valuation of risk assets and selection of risky investments in stock portfolios and capital budgets. Review of Economics and Statistics 47, pp. 13-37.

14. Liu, W. (2006), A liquidity-augmented capital asset pricing model, *Journal of Financial Economics* 82, pp. 631-671. 15. Jegadeesh, N. and Titman, S. (1993), Return to buying winners and selling loser: implications for stock market efficiency. *Journal of Finance* 48, pp. 65-91. 16. Judith, L. and Voronkova, S. (2012), Size, value and liquidity. Do they really matter on an emerging stock market ? *Emerging Markets Review* 13, pp. 8-25. 17. Lam, K. S. K and Tam, L. H. K. (2011) , Liquidity and asset pricing: Evidence from the Hong Kong stock market. *Journal of Banking and Finance* 35, pp. 2217-2230. 18. Korajcyk, R. and Sadka, R. (2008), Pricing the commonality across alternative measures of liquidity. *Journal of Financial Economics* 87, pp.45-72. 19. Malkiel, B.G., and Xu, Y. (1997), Risk and return revisited. *Journal of Portfolio Management* 23, pp. 9-14. 20. Mazouz, K., Joseph, N. L. and Joulmer, J. (2009), Stock price reaction to shocks, *Journal of Banking and Finance* 33, pp. 1-13. 21. Nguyen, N. H. and Lo, K. H. (2013), Asset returns and liquidity effects: Evidence from a developed but small market. *Pacific-Basin Finance Journal* 21, pp.1175-1190. 22. Pastor, L. and Stambaugh, R. (2003), Liquidity risk and expected stock returns. *Journal of Political Economy* 111, pp. 642-685. 23. Rouwenhorst, G. (1998), International momentum strategies. *Journal of Finance* 53, pp. 267-284. 24. Jun, S., Marathe, A., and Shawky, H. A. (2003), Liquidity and stock returns in emerging equity markets. *Emerging Markets Review* 4, pp. 1-24. 25. Liang, S.X. and Wei, J. K. C. (2012), Liquidity risk and stock returns around the world. *Journal of Banking and Finance* 36, pp. 3274-3288. 26. Sharpe, W. F. (1964), Capital asset prices: a theory of market equilibrium under condition of risk. *The Journal of Finance* 19, pp. 425-442. 27. Stattman, D. (1980), Book values and stock returns. *The Chicago MBA : A Journal of Selected Papers* 4, pp. 5-45. 28. Amihud, Y. and Mendelson, H. (1989), The effects of beta, bid-ask spread, residual risk, and size on stock returns. *Journal of Finance* 44, pp. 479-486.