

臺美共同基金資本流動與股票報酬之關聯探討

Chu, Nha Trang、陳美玲

E-mail: 9707266@mail.dyu.edu.tw

摘要

本研究目的主要探討台美共同基金流量與股票報酬之關聯。從Granger因果關係實證檢驗指出，台美共同基金流量皆領先股票市場報酬，因此，投資人可依賴台美共同基金流動之過去績效來預估股票報酬之走勢。此外，本研究採最小平方迴歸分析法(OLS)分別得知台美共同基金流量與其個別股市報酬間，均存在正相關；然美國共同基金流量與台灣股票市場報酬間卻存在負相關，但影響不大。以向量自我迴歸模型得知，於美國市場中，可藉由不同期數的基金流量預測出股票報酬，尤其以落後一期之影響最為顯著；另外，台灣共同基金流量與台灣股市報酬間，存在雙向回饋關係。由衝擊反應函數得知，台灣共同基金流量受衝擊後之反應強度與持續時間，均較美國強與長，隱含美國基金市場相較台灣，為一較具效率市場。

關鍵詞：共同基金流動，股票市場報酬，Granger因果關係，向量自迴歸模型，推動反應函數，最小平方迴歸分析法

目錄

中文摘要	iii Abstracts
iv Acknowledgments	v List of Tables
viii Lists of Figures a	ix Lists of Abbreviations
. x Chapter 1 Introduction	1 1.1 Background and motivations 1
1.2 Objectives	4 1.3 Chapter Outline 5 Chapter 2
Literature review 7	2.1 Background of Mutual fund market 7 2.2
Relations between mutual fund flows and stock market returns	8 2.3 Literature about
Methodology 12	14 3.1 Data Descriptions
Chapter 3 Data and Methodology	14 3.2 Methodology 15 Chapter 4 Empirical Results
26	4.1 Descriptive statistics 26 4.2 ARCH tests
29	4.3 Unit root test 30 4.4 Granger Causality test
32	4.5 Ordinary Least Squares test 33 4.6 Vector Autoregressive (VAR) Model Test
36	Chapter 5 Conclusions and Suggestions 47 5.1 Conclusions 47
5.2 Suggestions	48 References 49
Table 3-1 The definition of variables and data sources 15	Table 4-1 Descriptive statistics for mutual fund flows and stock market return in United States and Taiwan 28
Table 4-2 The results of ARCH test	Table 4-2 The results of ARCH test 30
Table 4-3 Unit root test on Level Data of Time Series 31	Table 4-4 Granger Causality Test
Table 4-5 The results of OLS Regression 32	Table 4-5 The results of OLS Regression 34
Table 4-6 The Optimal Lag Terms of VAR model	Table 4-6 The Optimal Lag Terms of VAR model 34
Table 4-7 VAR Empirical results of United States 37	Table 4-7 VAR Empirical results of United States 38
Table 4-8 VAR Empirical results of Taiwan	Table 4-8 VAR Empirical results of Taiwan 38
Table 4-9 Impulse Response Function Analysis of United States 40	Table 4-9 Impulse Response Function Analysis of United States 42
Figure 1-1 Structure of study	Figure 1-1 Structure of study 45
Figure 4-1 Trend graph of level data in United States 27	Figure 4-1 Trend graph of level data in United States 27
Figure 4-2 Trend graph of level data in Taiwan	Figure 4-2 Trend graph of level data in Taiwan 27
Figure 4-3 Response to shock of USMFF	Figure 4-3 Response to shock of USMFF 43
Figure 4-4 Response to shock of USSMR	Figure 4-4 Response to shock of USSMR 43
Figure 4-5 Response to shock of TWMFF	Figure 4-5 Response to shock of TWMFF 46
Figure 4-6 Response to shock of TWSMR	Figure 4-6 Response to shock of TWSMR 46

參考文獻

- Adamati, A.R., & Pfleiderer, P. (1990). Direct and indirect sale of information. *Econometrica*, 58 (4), 901-928. Alexakis, C., Niarchos, N., Patra, T., & Poshakwale, S. (2005). The dynamics between stock returns and mutual fund flows: Empirical evidence from the Greek market. *International Review of Financial Analysis*, 14 (5), 559-569. Bams, D., & Otten, R. (2002). European mutual fund performance. *European Financial Management*, 8 (1), 75-101. Barber, B. M., Odean, T., & Zheng, L. (2000) The behavior of mutual fund investors. Graduate School of Management. UC-Davis, Working Paper. Barber, B. M., Odean, T., & Zheng, L. (2001) Out of sight, out of mind: The effects of expenses on mutual fund flows. Davis Graduate School of Management. Working Paper. Blake, D., & Timmermann, A. (1998). Mutual fund performance:

evidence for the U.K. European Finance Review, 2 (1), 57-77. Boyer, Brian & Lu Zheng (2004). Who moves the market? A study of stock prices and sector cashflows. Working paper. University of Michigan. Braverman, O., Kandel, S., & Wohl, A. (2005). The bad timing of mutual fund investors. Centre for Economic Policy Research Discussion Paper 5243. Brennan, M. J., & Hughes, P. (1991). Stock prices and the supply of information. Journal of Finance, 46 (5), 1665-1691. Brennan, M. J., & Chordia, T. (1993). Brokerage commission schedules. Journal of Finance, 48 (4), 1379-1403. Brown, S. J., Goetzmann, W. N., Hiraki, T., Otsuki, T., & Shiraishi, N. (2001). The Japanese open-end fund puzzle. Journal of Business, 74 (1), 59-77 Cha, H. J., & Lee, B. S. (2001). The market demand curve for common stocks: Evidence from equity mutual fund flows. Journal of Financial and Quantitative Analysis, 36 (2), 195-220 Cha, H. J., & Kim J., (2006). Stock prices and equity mutual fund flows: A macro approach. Working Paper. Chalmers, J. M. R., Edelen, R. M., & Kadlec G. B. (2001). On the perils of financial intermediaries setting security prices: the mutual fund wild card option. Journal of Finance, 56 (6), 2209-2236. Chari, V. V., & Jagannathan, R. (1988). Banking panics, information and rational expectations equilibrium. Journal of Finance, 43 (3), 749-761. Chou, W. L., Gau, J. J. S., & Liang, K. Y. (2007). Industrial business cycle linkages between Taiwan and the United States: Evidence from the IT industry. Journal of Asian Economics, 18 (3), 439 -447. Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. Journal of the American Statistical Association, 74 (336), 427-431. Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. Econometrica, 49 (4), 1057-1072. Edelen, R. M. (1999). Investor flows and the assessed performance of open-end mutual funds. Journal of Financial Economics, 53 (3), 439-466. Edelen, R. M., & Warner, J. B. (2001). Aggregate price effects of institutional trading: a study of mutual fund flow and market returns. Journal of Financial Economics, 59 (2), 195-220. Edward, F., & Zhang, X. (1998). Mutual funds and stock and bond market stability. Journal of Financial Services Research, 13 (3), 257-282. Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: Representation, estimation, and testing. Econometrica, 55 (2), 251 -276. Fant, F. L. (1999). Investment behavior of mutual fund shareholders: The evidence from aggregate fund flows. Journal of Financial Markets, 2 (4), 391- 402. Frankel, J. A., & Rose, A. K. (1998). The endogeneity of the optimum currency area criteria. Economic Journal, Royal Economic Society, 108 (449), 1009 -1025. Goetzmann, W. N., Massa, M. & Geert, R. (2000). Behavioral factors in mutual fund flows. Yale ICF Working Paper No.00-14. Goetzmann, W. N. & Massa, M. (2003). Index funds and stock market growth. Journal of Business, 76 (1), 1-28. Granger, C. W. (1969). Investigating causal relations by econometric models and crosspectral methods. Econometrica, 37 (3), 424 -438. Gruber, M. J. (1996). Another puzzle: The growth in actively managed mutual funds. Journal of Finance, 51 (3), 783-810. Khorana, A., Servaes, H., & Tufano, P. (2005). Explaining the size of the mutual fund industry around the world. Journal of Financial Economics, 78 (1), 145 -185. Kim, J. (2004). Short run real exchange rate dynamics: A SUR approach. Applied Economics Letters, 11 (14), 909-913. Kim, J. (2007). Stock returns and aggregate mutual fund flows: A system approach. Far Eastern Meeting of the Econometric Society (25): Empirical Financial Economics. Lee, S., & Hansen, B. E. (1994). Asymptotic Theory for GARCH (1,1) Quasimaximum likelihood Estimator. Econometric Theory, 10 (1), 29-52 Mosebach, M., & Najand, M. (1999). Are the structural changes in mutual funds investing driving the U.S. stock market to its current levels? The Journal of Financial Research, 22 (3), 317-329. Nanda, V., Narayanan, M. P., & Warther, V. A. (2000). Liquidity, investment ability, and mutual fund structure. Journal of Financial Economics, 57 (3), 417-443. Nelson, C., & Plosser, C. (1982). Trends and random walks in macroeconomics time series: Some evidence and implications. Journal of Monetary Economics, 10 (1), 139-162. Oh, N. Y., & Parwada, J. T. (2007). Relations between mutual fund flows and stock market returns in Korea. International Financial Markets, Institutions & Money, 17 (2), 140-151. Fortune, P. (1998). Mutual funds, part II: Fund flows and security returns, New England Economic Review, 3-22. Phillips, P. C. B. (1998). Impulse response and forecast error variance asymptotics in nonstationary VARs. Journal of Econometrics, 83 (1; 2), 21-56. Philippas, N. D. (2002). The interaction of mutual funds flows and security returns in emerging markets: The case of Greece. Working paper. Potter, M. (1999). The dynamic relationship between security returns and mutual fund flows. University of Massachusetts-Amherst Ph.D. Dissertation. Remolona, E. M., Kleiman, P., & Gruenstein, D. (1997). Market returns and mutual fund flows. Economic Policy Review, 3 (2), 33-52. Santini, D. L., & Aber, J. W. (1998). Determinants of net new money flows to the equity mutual fund industry. Journal of Economics and Business 50 (5), 419-429. Sirri, E. R., & Tufano, P. (1998). Costly search and mutual fund flows, Journal of Finance, 53 (5), 1589-1622. Tarun, C. (1996). The structure of mutual fund charges. Journal of Financial Economics, 41 (1), 3-39. Warther, V. A. (1995). Aggregate mutual fund flows and security returns. Journal of Financial Economics, 39 (2; 3), 209-235. Watson, M. W. (1994). Vector autoregressions and cointegration. In Handbook of Econometrics, Volume IV (eds. Engle, R.F. and McFadden, D.L.), Elsevier Science B.V. Wei, J. K. C., Liu Y. J., Yang C. C., & Chaung G. S. (1995). Volatility and price change spillover effects across the developed and emerging markets. Pacific-Basin Finance Journal, 3 (1), 113-136. Zheng, L. (1999). Is money smart? A study of mutual fund investor ' s fund selection ability. Journal of Finance, 54 (3), 901-933.