

# 房價泡沫現象之研究

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## 摘要

在2006年美國次級房貸問題及2007至2009年全球金融海嘯等事件發生之後，美國房價泡沫化的問題，日愈受到重視。本研究採用房價所得比，加以檢定房價泡沫化的問題。此外本研究選用美國30大都會為研究對象，研究期間為1980年1月至2010年6月(季資料)，而主要的研究方法則採取Panel Cointegration檢定法。Baltagi (2001)指出使用panel data架構的主要優點為：panel data結合了時間序列(time series)與橫斷面(cross-sectional)資料的形式，與橫斷面或時間序列估計最大的不同之處在於：能提供更多的樣本數，大幅增加自由度，使估計更具效率性，以及降低估計時所產生的偏誤，並減少共線性的問題。經過共整合檢定結果，顯示房屋價格指數與人均所得指數間具有共整合關係，亦即兩者間存在長期的關係，並無房價泡沫化的問題。

關鍵詞：房價泡沫化、Panel共整合檢定、人均所得

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## 參考文獻

- 一、中文部分 陳明吉 (2003), 「台北市房價之時間序列特性與模型之研究」，住宅學報，第12卷第2期，頁69-90。高國峰，張金鶲和林秋瑾 (2000)，「需求面分析台北市合理房價」，中華民國住宅學會第九屆年會論文集。彭建文 (2004)，「空屋狀況變遷與原因分析」，住宅學報，第13卷第2期，頁23-46。張金鶲，高國峰和林秋瑾 (2001)，「合理房價—需求面分析」，住宅學報，第10卷第1期，頁51-66。張金鶲，陳明吉，鄧筱蓉和楊智元 (2009)，「房價泡沫知多少?-房價VS.租金、房價VS.所得」，住宅學報，第18卷第2期。曾建穎，張金鶲和花敬群 (2002)，「不同空間，時間住宅租金與其房價關聯性之研究-台北地區之實證現象分析」，住宅學報，第14卷第2期，頁27-49。傅英芬和康信鴻 (2008)，「通貨膨脹與台灣房屋建築產業相關類股動能現象之探討」，住宅學報，第17卷第2期，頁35-62。二、英文部分 Abuaf, N. and P. Jorion (1990), "Purchasing Power Parity in the Long Run," Journal of Finance, 45, 157-174. Andrews, D.W.K. (1991), "Heteroskedasticity and Autocorrelation Consistent Covariance Matrix Estimation," Econometrica, 59, 817 - 858. Bai, J. and P. Perron (1998), "Estimating and Testing Linear Models with Multiple Structural Changes," Econometrica, 66 (1), 47 - 78. Bai, J. and P. Perron (2001), "Multiple Structural Change Models: A Simulation Analysis," Technical Report. Baker, D. (2007), "2007 Housing Bubble Update: 10 Economic Indicators to Watch," Issue Brief, Center for Economic and Policy Research. Baltagi, B. H. (2001). Econometrics Analysis of Panel Data (Wiley, Chichester). Black, F.(1976), "The Pricing of Commodity Contracts," Journal of Financial Economics, 3, 167-179. Black, A., P. Fraser, and M. Hoesli (2006), "House Prices, Fundamentals and Bubbles," Journal of Business Finance & Accounting, 33(9) & (10), 1535-1555. Blanchard, O. J and S. Fisher (1989) "Lecture on Macroeconomics," The MIT Press, Cambridge, Mass. Bourassa, S. C., P. H. Hendershott, and J. Murphy (2001), "Further Evidence on the Existence of Housing Market Bubbles," Journal of Property Research, 18(1), 1-19. Breuer, J. B., R. McNow and M. S. Wallace(2001), "Misleading Inferences from Panel Unit-Root Tests with an Illustration from Purchasing Power Parity," Review of International Economics, 9(3), 482-493. Carrion-i-Silvestre, J. L., T. Del Barrio, and E. L'opez-Bazo (2003), "Breaking the Panels. An Application to the GDP Per Capita," working paper, University of Barcelona. Case, K. E and R. J. Shiller (2003), "Is There a Bubble in the Housing Market?" Brookings Papers on Economic Activity, 2, 299-362. Chan, K., K. C. Chan, and G. A. Karolyi (1991), "Intraday Volatility in the Stock Index and Stock Index Futures Markets," The Review of Financial Studies, 4, 657-684. Chen, M. C. and K.

Patel (1998), " House Price Dynamics and Granger Causality: An Analysis of Taipei New Dwelling Market, " Journal of Asian Real Estate Society, 1(1), 101-126. Clark, S. P. and T. D. Coggin (2010), " Was There a U.S. House Price Bubble? An Econometric Analysis Using National and Regional Panel Data, " Quarterly Review of Economics and Finance. Diba, B. T., and H. I. Grossman (1984), " Rational Bubbles in the Price of Gold, " NBER Working Paper No. 1300 Federal Housing Finance Agency , <http://www.fhfa.gov/> , 2011, May 15 Fisher, R.A. (1932), " Statistical Methods for research Workers, " Oliver and Boyd, Edinburgh 4th Ed. Garino, G. and L. Sarno (2004), " Speculative Bubbles in U.K. House Prices: Some New Evidence, " Southern Economic Journal, 70(4), 777-795. Giussani, B. and G.. Hadjimatheou (1991), " Modelling Regional House Price in United Kingdom, " The Journal of the Regional Science Association International, 70(2), 201-219. Hadri, K. (2000), " Testing for Stationarity in Heterogeneous Panel Data, " Econometrics Journal, 3, 148-161. Himmelberg, C., C. Mayer, and T. Sinai (2005), " Assessing High House Prices: Bubbles, Fundamentals and Misperceptions, " Journal of Economic Perspective, 19(4), 67-92. Homm, U., and J. Breitung (2010), " Testing for Speculative Bubbles in Stock Markets, a Comparison of Alternative Methods, " Working paper, Department of Economics, University of Bonn. Hui, E. C. M., and S. Yue (2006), " Housing Price Bubbles in Hong Kong, Beijing and Shanghai: A Comparative Study, " Journal of Real Estate Finance and Economics, 33(4), 299-327. Im, K. S., M. H. Pesaran, and Y. Shin(2003), " Testing for Unit Roots in Heterogeneous Panels, " Journal of Econometrics, 115, 53-74. Kindleberger, C. (1987), " Bubbles, " In the new Palgrave: A Dictionary of Economics, Edited by John Eatwell, Murray Milgate, and Peter Newman. New York: Stockton Press, 281. Kohn, J. and S. K. Bryant (2010), " An Econometric Interpretation of the Recent US Housing Boom, " Research in Business and Economics Journal. Koutmos, G. and M. Tucker (1996), " Temporal Relationships and Dynamics Interactions between Spot and Futures Stock Markets, " Journal of Futures Markets, 16, 55-69. Kurozumi, E. (2002), " Testing for Stationarity with a Break, " Journal of Econometrics, 108, 63 – 99. Kwiatkowski, D., P. C. B. Phillips, P. J. Schmidt, and Y. Shin (1992), " Testing the Null Hypothesis of Stationarity against the Alternative of a Unit Root: How Sure are We That Economic Time Series Have a Unit Root, " Journal of Econometrics, 54, 159 – 178. Levin, A., C. F. Lin, and C. Chu (2002), " Unit Root Tests in Panel Data: Asymptotic and Finite-Sample Properties, " Journal of Econometrics, 108, 1-24. Maddala, G.. S. and S. Wu (1999), " A Comparative Study of Unit Root Tests with Panel Data and a New Simple Test, " Oxford Bulletin of Economics and Statistics, 61, 631-652. McCoskey, S. and C. Kao (1998), " A Residual-Based Test of the Null of Cointegration in Panel Data, " Econometric Reviews, 17, 57 – 84. Milne, A. (1991), " Incomes, Demography and UK House Prices, " Centre for Economic Forecasting Discussion Paper No 30-90, London Business School Newey, W. K. and K. D. West (1994), " Automatic Lag Selection in Covariance Matrix Estimation, " Review of Economic Studies, 61, 631 – 653. O ' Connell, P. (1998), " The Overvaluation of Purchasing Power Parity, " Journal of International Economics, 44, 1-19. Pagan, A. R., and M. R. Wickens (1989), " A Survey of Some Recent Econometric Methods ", Economics Journal, vol.99, pp.962~1025. Perron, P. (1989), " The Great Crash, the Oil Price Shock and the Unit Root Hypothesis, " Econometrica, 57 (6), 1361 – 1401. Perron, P. and T. Vogelsang(1992), " Nonstationarity and Level Shifts with an Application to Purchasing Power Parity, " Journal of Business & Economic Statistics, 10 (3), 301 – 320. Phillips, P. C. B., Y. Wu, and J. Yu (2010), " Explosive Behavior in the NASDAQ: When did Exuberance Escalate Asset Values? " International Economic Review, 51. Sarno, L. and M. Taylor (1998), " Real Exchange Rates Under the Recent Float: Unequivocal Evidence of Mean Reversion, " Economics Letters, 60, 131-137. Schwarz, G.. (1978), " Estimating the Dimension of a Model, " Annals of Statistics, 6, 461-464. Shin, Y. and A. Snell (2000), " Testing for Stationarity in Heterogeneous Panels with Serially Correlated Errors, " Technical Report, Department of Economics, University of Edinburgh. U.S. Census Bureau , <http://www.census.gov/> , 2011, May 15 Xiao, Q., and G.. K. R. Tan (2007), " Signal Extraction with Kalman Filter: A Study of the Hong Kong Property Price Bubbles, " Urban Studies, 44(4), 865-888.