The relationship of price on equity REITs and Macroeconomic variables in US and Japan

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ABSTRACT

The main purpose of this study is to explore the relationship between REIT price and Macroeconomic variables in United States and Japan. Examining the causality between REIT price and macroeconomic variables in United States and Japan, respectively; To investigate the long-run and short relationship between REIT price and macroeconomic variables in United States and Japan, respectively; after that we will employ GJR GARCH, understanding the conditions of volatility and effects of information transmission between US and Japan REIT price, and determining whether there exist spillover effect between United States and Japan REIT market

Keywords: REIT price Macroeconomic variables Cointegration test Granger Causality test VAR model GJR GARCH model.

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REFERENCES

AL-Sharkas, A. (2004). The Dynamic relationship between macroeconomic factor and the Jordanlan stock market. International Journal of Applied Econometrics and Quantitative Studies, l, 1-1Allen, M., Madura, J., & Springer, T. (2000). REIT characteristics and the sensitivity of REIT returns. Journal of Real Estate Finance and Economics, 21, 141– 152.Banerjee, A., Dolado, J. Galbraith & D. Hendry. Cointegration, error correction, and the econometric analysis of non-stationary data, Oxford Unversity Press.Bollerslev, T. (1986). Generalized autoregressive conditional heteroscedastcity. Journal of Ecometrics 31, 307-327.Brueggeman, W.B., Chen, K.C., & Thibodeau, T.G. Real Estate Investment Funds: Performance and Porfolio Considerations. AREUEA Journal Fall, 333-345Chan, K. C., P. Hendershott & A. B. Sanders (1990) " Risk and Return on Real Estate: Evidence from Equity REITs" AREUEA Journal 18: 431-452Chen, K., & Tzang, D. (1988). Interest-rate sensitivity of real estate investment trusts. Journal of Real Estate Research, 3, 13– 22.Cheung, Y., & Lilian, K. Ng (1998) " International Evidence on the Stock Market and Aggregate Economic Activity" Journal of Empirical Finance 5: 281-296Dufour, J. M., & Renault, E. (1998). Short-run and long-run causality in time series: Theory. Econometrica, 66 (5), 1099-1125.Engle, R. (1982). Autogressive Conditional Heteroscedasticity with Estimates of the variance of United Kingdon Inflation. Econometrica, 50, 987-1007Engle, R. F., & Granger, C. W. J. (1987). Co-integration and error correction: Representation, estimation, and testing. Econometrica, 55 (2), 251-76.Fama, E. F. & G. W. Schwert (1977) " Asset Returns and Inflation" Journal of Financial Economics 5: 115-146Fama, E. F. (1981) " Stock Returns, Real Activity, Inflation and Money" . American Economic Review, 71, 545-565Geske, R., & Roll, R. (1983). The Fiscal and Monetary linkage between Stock returns and inflation. Journal of Finance 38, 1-33Glascock, J. L. & W. N. Davidson (1995). Performance Measures of Real Estate Firm Common Stock Returns. 143-156, in Schwartz and Kapplin (eds) Alternative Ideas in Real Estate Investment, Real Estate Research Issues 2, American Real Estate SocietyHamao, Y.R., Masulis, R.W. & Ng, V.K., 1990. Correlation in price changes and volatility across international stock markets. The Review of Financial Studies 3, 281– 307Hamao, Y.R., Masulis, R.W. & Ng, V.K., 1991. The effect of the 1987 stock crash on international financial integration. In: Ziemba, W.T., Bailey, W. and Hamao, Y.R., Editors, 1991. Japanese Financial Market Research, Elsevier Science Publishers B, 483– 502.Hamilton, J.D. (1994). Time Series Analysis. 1st edition. Priceton, New Jersey: Princeton University Press.Hartzell, J. C., Kallberg, J. G., & Liu, C. H. (2005). The role of underlying real asset market in REIT IPOs. Real Estate Economics, 33 (1), 27-50.Harvey, C., (1991). Gjerde, ?., & S?ttem, F. (1999). Causal relations among stock returns and croeconomic variables in a small, open economy. Journal of International FinancialMarkets, Institutions and Money 61 – 74Kapplin, S. D. and A. L. Schwartz (1995) " Recent Performance of US Real Estate Securities" , 5-18 in Schwartz and Kapplin (eds) Alternative Ideas in Real Estate Investment, Real Estate Research Issues 2, American Real Estate SocietyLi, Y & K. Wang (1995) " The predictability of REIT returns and market segmentation" , Journal of Real Estate Research 10(4), 471-482Li, J., Mooradian, R. M., & Shiawee, X. Y. Economic Forces, Asset Pricing, and REIT Returns Granger, C., & Newbold, P. (1974). Spurious regressions in econometrics. Journal of Econometrics, 2 (2), 111-120.Ling, D. C., & Naranjo, A. (1999). The Integration of Commercial Real Estate Markets and Stock Markets. Journal of Real Estate Finance and Economics, V 27 (3), 483-515Liow, K.H. & Q. Huang (2004). Interest Rate Risk and Time-Varying Excess Returns for Property Stocks: An Asset Pricing Perspective. Working Paper, Department of Real Estate, NUSMaysami, R. C. & Koh, T. S. 2000. A vector error correction model of the Singapore stock market. International Review of Economics and Finance, 9, 79-96.McCue, T., & Kling. J. (1994). Real estate return and the macroeconomy: Some empirical evidence from real estate investment trust data, 1972– 1991. Journal of Property Research, 9, 277– 288.Mueller, G., & Pauley, K. (1995). The effect of interest rate movements on real estate investment trusts. Journal of Real Estate Research, 10, 319– 325.Mukherjee, T. K. & Naka, A. 1995. Dynamic relations between macroeconomic variables and the Japanese stock market: an application of a vector error correction model. The Journal of Financial Research, 18(2), 223-237.Naranjo, A. and Ling, D.C., 1997. Economic risk factors and commercial real estate returns. J. Real Estate Finance Econ. 14, 283– 307Park, J. Y., Mullineaux, D. J., Chew, I. Are REITs inflation Hedges? Journal of Real Estate Finance and Economics 3, 91-103Phil, S. (1999). REITs: Outstanding value or same old story? Journal of Financial Planning, 12 (1), 38-39.Ramin, C. M., Lee, C. H., & Mohamad, A. H. (2004). Relationship between Macroeconomic Variables and Stock Market Indices: Cointegration Evidence from Stock Exchange of Singapore' s All-S Sector Indices. Jurnal Pengurusan, 24, 47-77R. Webb, J., F.C. Neil Myer, & T. He, L. (2003). Interest Rate Sensitivities of REIT Returns. International real estate review, 6 (1), 1 – 21S.Ganesan & Y.H.Chiang. (1998). The inflation-Hedging characteristics of Real and Financial Assets in Hong Kong. Journal of Real Estate Porfolio Management.Simpson, M. W., Ramchander, S., & Webb, J. R. (2007). The Asymmetric Response of Equity REIT Returns to Inflation. Journal of Real Estate Economics, 34, 513– 529Wilson, P. J., & Zurbruegg. R. (2003). International deversification of Real estate assets: Is it worth it? Evident from the literature. UTS working paper 126