A Study on the Asymmetric Effects of the U.S. And Japanese Reits Stock Price Volatility ^.

- **Author(s):** Cha Soon Choi

Abstract: This study analyzed the asymmetric effects of real estate investment trusts (REITs) stock price volatility on information through the GJR(1,1)-MA(1) model using the U.S. REITs index released by the NAREIT and the Japanese REITs index released by SMTRI. While REITs stock price volatility changes according to the time lag were examined, an analysis of the GARCH (1,1)-MA(1) model was carried out for comparison with the GJR(1,1)-MA(1) model estimates. According to the analysis results, the time-varying of the REITs stock price volatility could be estimated with the GARCH (1,1)-MA(1) model in both the U.S. and Japan. As a result of the analysis using the GJR (1,1)-MA (1) model, it was found that significant asymmetric volatility existed between unexpected returns and conditional variance in the U.S. and Japanese REITs market. This means that REIT's stock price volatility more sensitively responds to bad news compared to good news. This phenomenon was revealed more clearly after the global financial crisis, and so the U.S. and Japanese financial markets' coupling took place fast. Because the returns of REITs have a high correlation with risk premium, it is implied that there is a need for an investment strategy and risk management depending on information type.