Measuring Fundamental Value of Stock Index through Dividend Futures Prices

Masataka Suzuki

Department of Economics, Musashi University

Abstract

This study analyzes the dynamic relationship between stock index prices and their fundamental values. From observed prices in the dividend futures market, fundamentals of the stock index are estimated with minimum assumptions. In this study, we focus on the EURO STOXX 50 index, which is a major euro zone stock index, and decompose the index prices into fundamentals and bubble components. By examining the dynamic behavior of both index prices and their fundamentals, the following notable findings are obtained: fundamentals are cointegrated with the index prices, fundamentals serve as a lower bound of the index prices, the index price bubbles emerge periodically, and price-fundamentals ratios of the index strongly predict future index returns. These results suggest that our fundamentals measure provides monetary authorities and market participants with the opportunity of early detection for stock price bubbles.