Forecasting the Bond-Equity Yield Ratio Using Regime Switching and Cointegration Models: An international Comparison

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Abstract

The bond-equity yield ratio is defined as the ratio of the coupon yield on long government bonds to the dividend yield on equity. Commonly named in the UK as the gilt-equity yield ratio (GEYR), it has been argued to capture the relative value of bonds and equities through the differential in their income yield. While Brooks and Persand (2001) have been the first to endogenise the threshold at which the ratio switches from being high or low and vice-versa, they just use one single trading rule based on the one-step ahead forecasted value of the ratio, for three different countries. We add another trading rule based on the one-step ahead forecasted probability of being in the high (or low) regime and extend the sample to seven countries, including Japan, the Netherlands, Belgium and France. We also use another methodological approach based on cointegration analysis since stock index prices, dividends and interest rates may be found to have a stationary long-term relationship. We finally conclude by comparing the forecasting ability of these two approaches with classical models such as Random Walk with drift, SETAR, MA(1)-GARCH et AR(p).

Keywords: Equity Yield, GEYR, Markov Switching, Regime Model, Forecasting, Cointegration

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