

Modeling Persistence in Expected Returns ^{*}

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Abstract

The major contribution of this paper is to explicitly model the persistence in the time series of expected returns. An earlier study by Kojien and Van Binsbergen (2010) shows the expected returns series is very persistent, having close to unit root properties over time. We develop an infinite state space representation of the net present value relationship between the dividend price ratio, dividend growth and expected returns while assuming that the latter is a long memory process. The time series properties of the variables are found to be stronger when the latent variable of returns is assumed to exhibit hyperbolic decay in the first moments. Our results show that by including the persistence factor, the fit of expected returns is improved.

Key Words: Expected Returns, Asset Pricing, Persistence, State Space Modeling

JEL References: G12, G14, G17

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