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Components of Bull and Bear Markets: Bull Corrections and Bear Rallies

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Abstract

Existing methods of partitioning the market index into bull and bear regimes do not identify market corrections or bear market rallies. In contrast, our probabilistic model of the return distribution allows for rich and heterogeneous intraregime dynamics. We focus on the characteristics and dynamics of bear market rallies and bull market corrections, including, for example, the probability of transition from a bear market rally into a bull market versus back to the primary bear state. A Bayesian estimation approach accounts for parameter and regime uncertainty and provides probability statements regarding future regimes and returns. We show how to compute the predictive density of long-horizon returns and discuss the improvements our model provides over benchmarks. This article has online supplementary materials.

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