Don't Optimize! - Portfolios with Bayesian Change Point Analytics

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Keywords: Portfolio, Bayesian Change Points, MCMC, Shiny

In this talk we present a new unconventional method based on a predictive Bayesian Change Point (BCP) Stability Analytics [4] and Markov Chain Monte Carlo method ([2] and [3]) to design portfolios. Our approach makes optimization obsolete and comes with many additional advantages compared to standard investment strategies [1]. The portfolios are characterized by a high degree of stability of the underlying price process resulting in a steady increase of returns, low drawdowns, short recovery times, and low volatilities.

Two examples are presented: (i) an Euro based ETF portfolio build from Large and Small Cap Equities, REITS, and Government Bonds, and (ii) an USD based sectored portfolio of MSCI Emerging Market Equities. All calculations were done in R using the Rmetrics package family. Furthermore, a real time R shiny web application which visualizes stability forecasts and portfolio rebalancing will be demonstrated.

References


