Does a Bayesian approach generate robust forecasts? Evidence from applications in portfolio investment decisions

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Abstract We employ a statistical criterion (out-of-sample hit rate) and a financial market measure (portfolio performance) to compare the forecasting accuracy of three model selection approaches: Bayesian information criterion (BIC), model averaging, and model mixing. While the more recent approaches of model averaging and model mixing surpass the Bayesian information criterion in their out-of-sample hit rates, the predicted portfolios from these new approaches do not significantly outperform the portfolio obtained via the BIC subset selection method.

 $\label{eq:continuity} \textbf{Keywords} \quad \text{Model selection} \cdot \text{BIC} \cdot \text{Model averaging} \cdot \text{Model mixing} \cdot \text{Stock} \\ \text{predictability} \cdot \text{Financial markets}$