

Abstract

The predictability of stock returns has been a widely discussed topic in the financial literature. In the presented thesis, we examine the effect of 20 possible predictors on S&P 500 excess returns in the time period from June 1998 till December 2016. However, traditional models examining stock returns usually ignore the issue of model uncertainty. In order to explicitly incorporate uncertainty about the model into the analysis, we employ two model averaging techniques, in particular Bayesian model averaging (BMA) and frequentist model averaging (FMA). As a robustness check we use three different combinations of priors within BMA framework. We assess the quality of their predictions and compare the results with the traditional methods based on model selection criteria. We find out that among the most important variables explaining excess returns on S&P 500 stock index are three-month Treasury bill rate, dividend yield, term premium, payout ratio, excess returns lagged twice, and default risk premium. These are robust across all models we have estimated. Although frequentist model averaging provides in-sample predictions superior to BMA as the literature suggests and it also performs better than models selected according to popular statistical criteria, it fails to outperform the Bayesian model averaging out-of-sample. Moreover, among the three BMA specifications, the data-dependent hyper-g prior performs the best in-sample and out-of-sample.

JEL Classification C11, C52, G12

Keywords stock return predictability, model uncertainty, Bayesian model averaging, frequentist model averaging

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