Out-of-Sample Equity Premium Predictability and Sample Split Invariant Inference

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Abstract
For a comprehensive set of 21 equity premium predictors we find dramatic disagreement between out-of-sample predictability results depending on the choice of the sample split date. To resolve this issue we propose reporting in graphical form the out-of-sample predictability criteria for every possible sample split, and two out-of-sample tests that are invariant to the sample split choice. We provide Monte Carlo evidence for the validity of the bootstrap based inference we propose. We find that many investors making decisions in real time could have benefited from conditional predictions. The in-sample, and the sample split invariant out-of-sample mean and maximum tests that we propose, are in broad agreement. We also show how one can construct sample split invariant out-of-sample predictability tests that simultaneously control for data mining across many variables.