High Dimensional Forecasting

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Econ 722

Overview

- What have we covered in the course so far? Try to tie everything together today, suggest extensions and open problems.
- Survey articles
- Diffusion index forecasting (Stock and Watson 2002)
- Other ways of extracting factors: Sparse PCA, ICA
- Other ways of forecasting: Stock and Watson 2012, Kim and Swanson
- Target or not? Bai and Ng (2008), Kelly & Pruitt, PLS, etc.
- Nonlinear stuff? Kernel methods, Bai and Ng (2008), that recent paper from a job candidate...
- Boosting and Bagging
- Open Questions: selection with generated predictors, how should we choose lasso and ridge parameters for dependent data?
- Inference post-selection with shrinkage estimators.