

GUIDANCE FOR EMPIRICAL APPLICATION IN  
Shrinkage Estimation of High-Dimensional Factor  
Models with Structural Instabilities

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NOVEMBER 2015

The programs are tested in Matlab R2014b.

1. **Program:** To get the empirical results in Table 4, run  
main\_empirical.m

2. **Data:** SW\_xdata\_ver03\_long.mat is the dataset used in the empirical application.

3. **Other Folders:**

(a) **CLSFactorProg:** This folder contains functions used to compute the shrinkage procedure proposed in Cheng, Liao, Schorfheide.

(b) **OptimizationFunctions:** This folder (from Mark Schmidt) contains programs for the group Lasso estimator.