

Supporting file to
**Causal Vector Autoregression Enhanced with Covariance and Order
Selection**

Fitting the $CVAR(p)$ model with p giving the optimal criteria, for the financial data spanning the first 200 days

Unrestricted $CVAR(p)$ model: The RMSE of the model fit is 0.00075 for $p = 1$ and 0.00073 for $p = 2$.

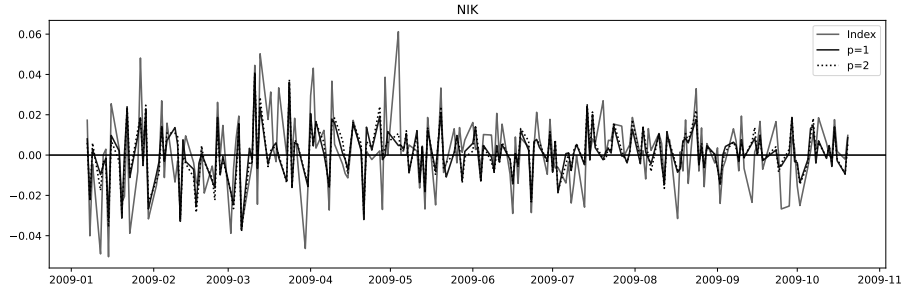


Figure 1: Fitting of NIK, component-wise RMSE is 0.00986 for $p = 1$ and 0.00976 for $p = 2$.

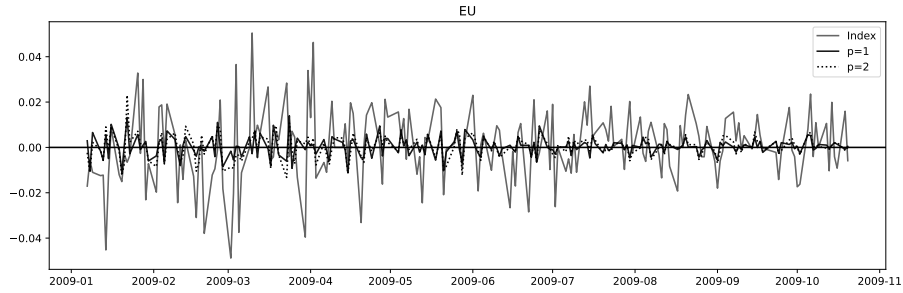


Figure 2: Fitting of EU, component-wise RMSE is 0.00265 for $p = 1$ and 0.00261 for $p = 2$.

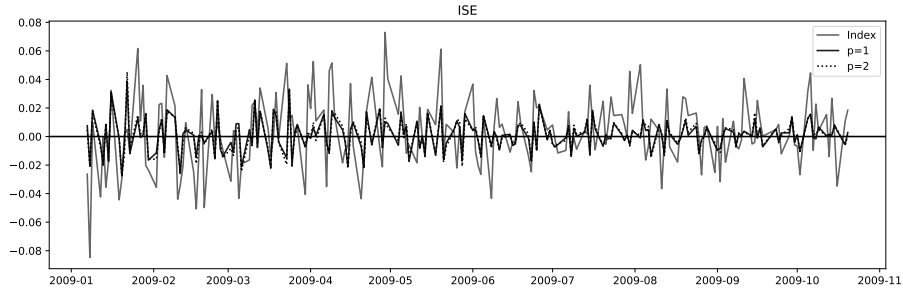


Figure 3: Fitting of ISE, component-wise RMSE is 0.01335 for $p = 1$ and 0.01329 for $p = 2$.

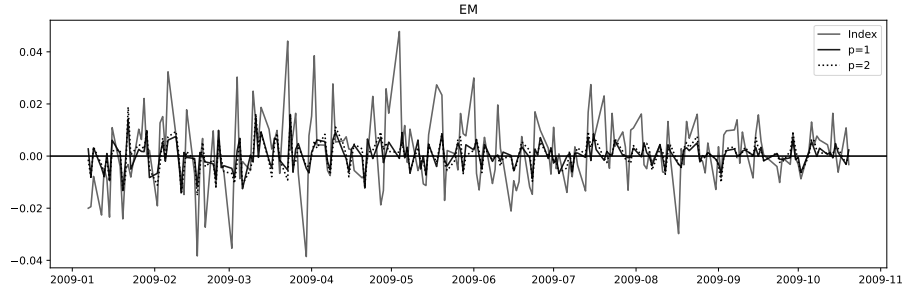


Figure 4: Fitting of EM, component-wise RMSE is 0.00575 for $p = 1$ and 0.00560 for $p = 2$.

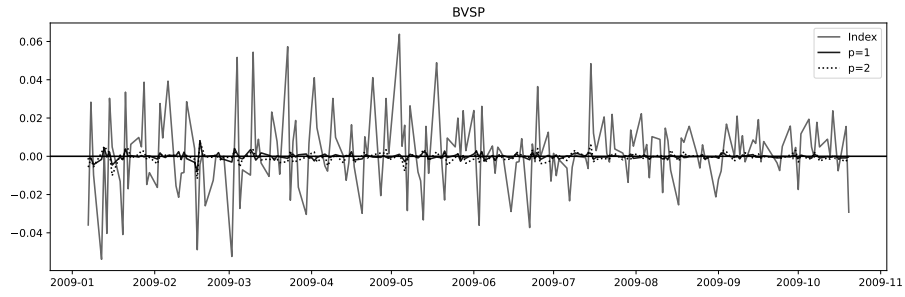


Figure 5: Fitting of BVSP, component-wise RMSE is 0.01037 for $p = 1$ and 0.01026 for $p = 2$.

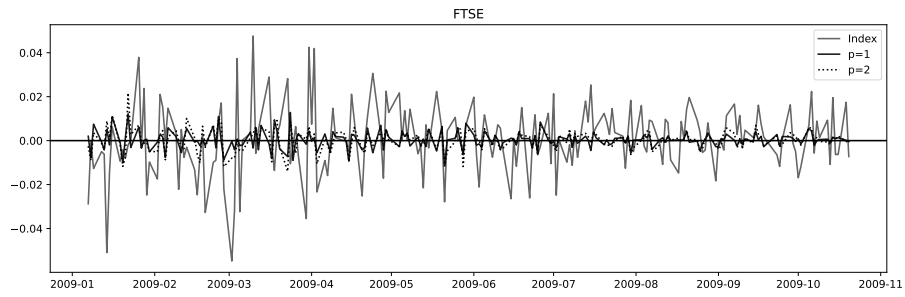


Figure 6: Fitting of FTSE, component-wise RMSE is 0.00607 for $p = 1$ and 0.00589 for $p = 2$.

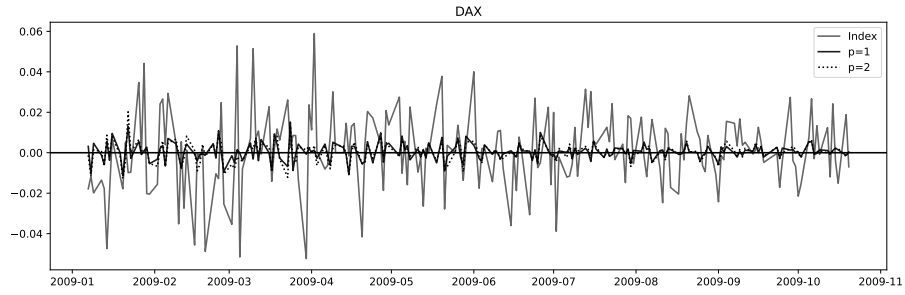


Figure 7: Fitting of DAX, component-wise RMSE is 0.00985 for $p = 1$ and 0.00958 for $p = 2$.

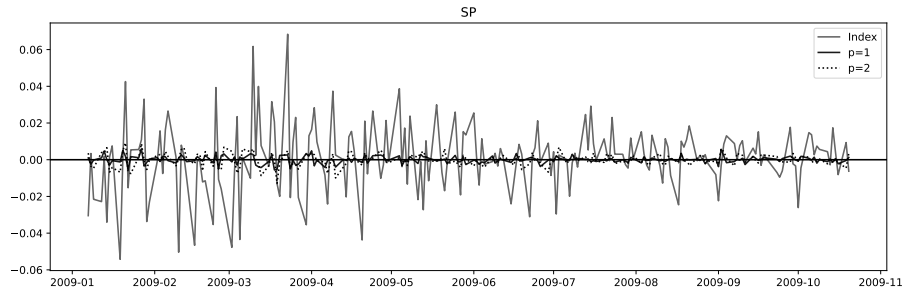


Figure 8: Fitting of SP, component-wise RMSE is 0.01400 for $p = 1$ and 0.01384 for $p = 2$.

Restricted CVAR(p) model: The RMSE of the model fit is 0.00148 for $p = 1$ and 0.00185 for $p = 4$.

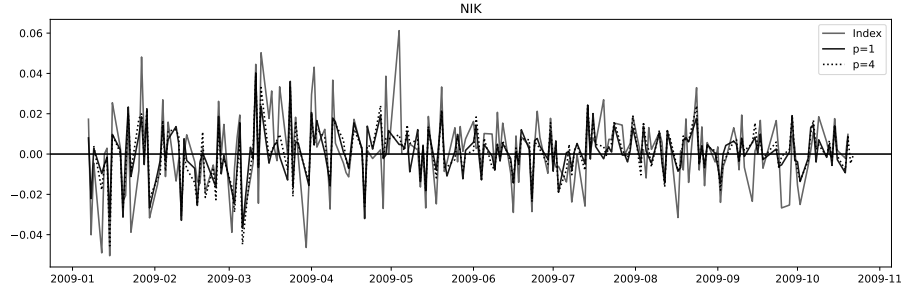


Figure 9: Fitting of NIK, component-wise RMSE is 0.01360 for $p = 1$ and 0.01473 for $p = 4$.

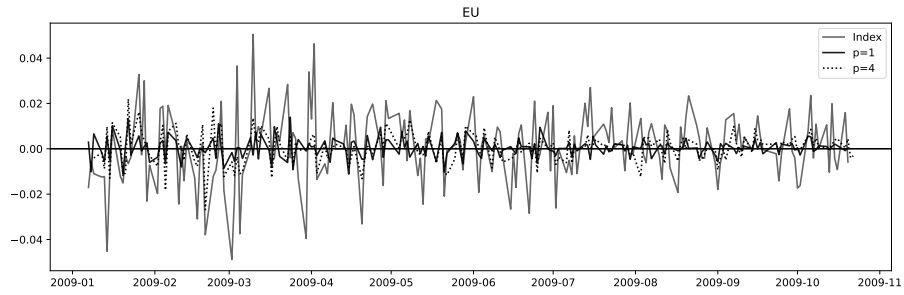


Figure 10: Fitting of EU, component-wise RMSE is 0.01269 for $p = 1$ and 0.01246 for $p = 4$.

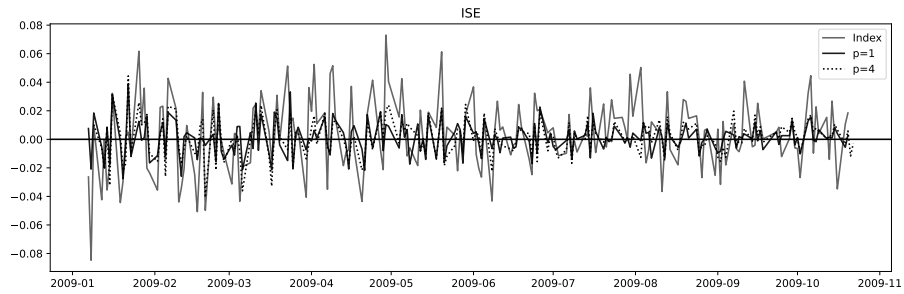


Figure 11: Fitting of ISE, component-wise RMSE is 0.00936 for $p = 1$ and 0.01225 for $p = 4$.

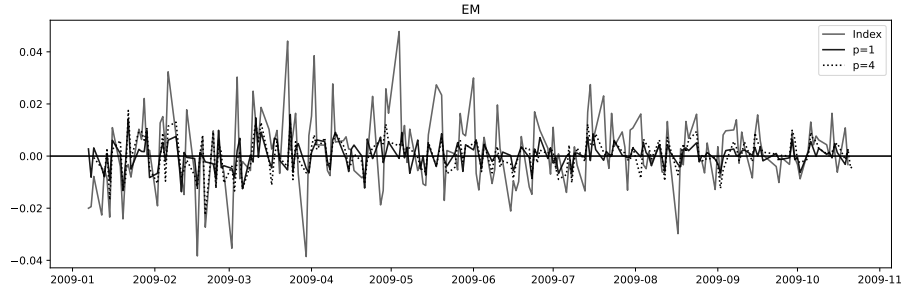


Figure 12: Fitting of EM, component-wise RMSE is 0.00875 for $p = 1$ and 0.00961 for $p = 4$.

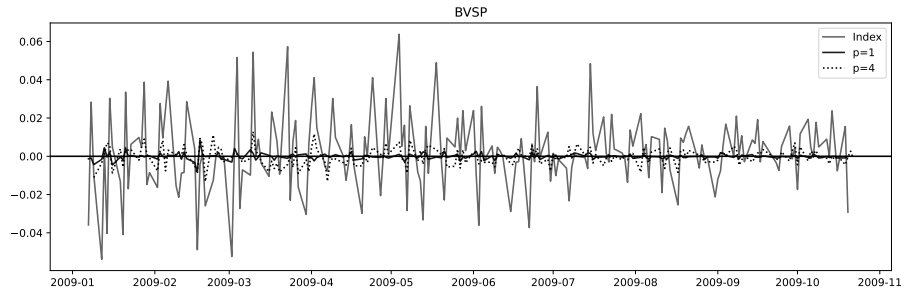


Figure 13: Fitting of BVSP, component-wise RMSE is 0.01351 for $p = 1$ and 0.01397 for $p = 4$.

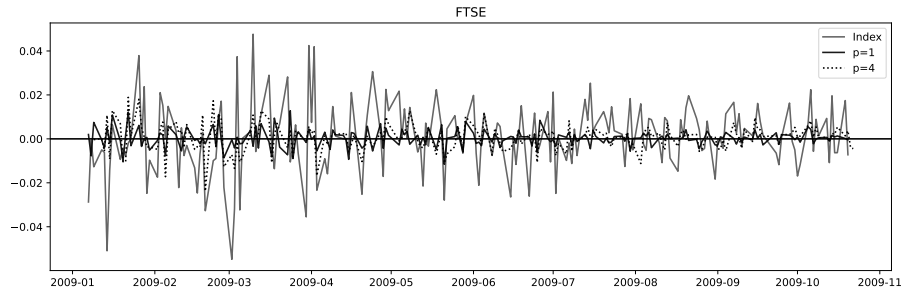


Figure 14: Fitting of FTSE, component-wise RMSE is 0.01037 for $p = 1$ and 0.01097 for $p = 4$.

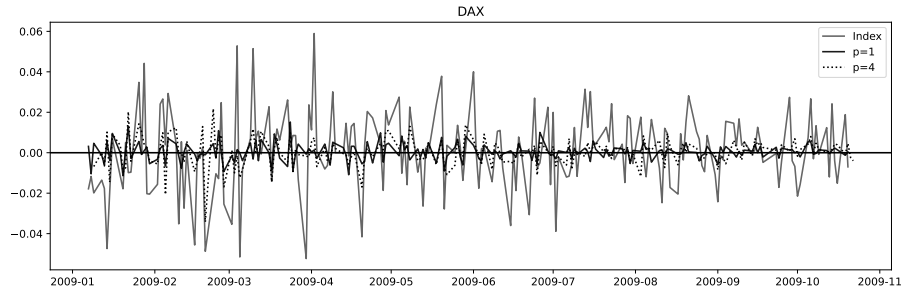


Figure 15: Fitting of DAX, component-wise RMSE is 0.02049 for $p = 1$ and 0.02331 for $p = 4$.

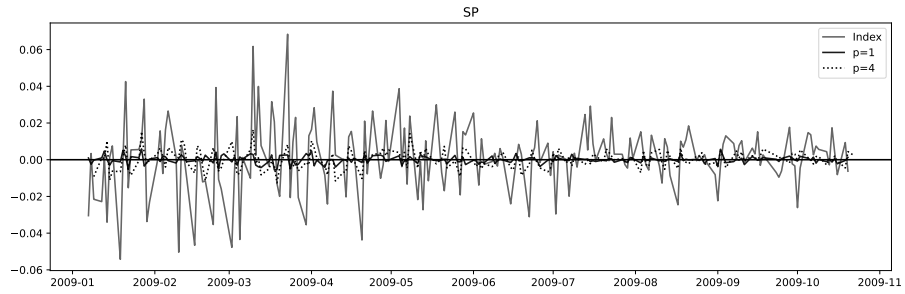


Figure 16: Fitting of SP, component-wise RMSE is 0.01598 for $p = 1$ and 0.01613 for $p = 4$.