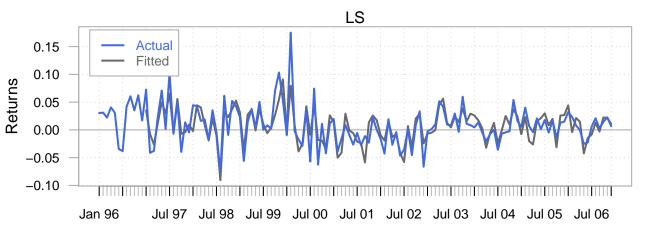
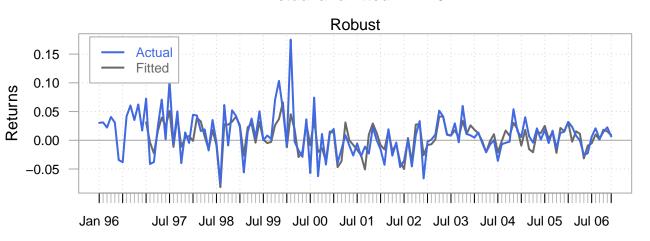


## Actual and fitted: HAM3

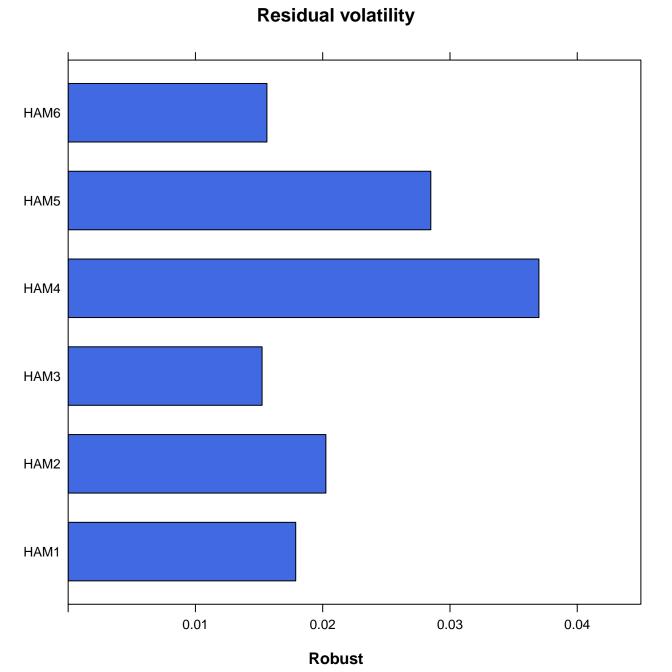




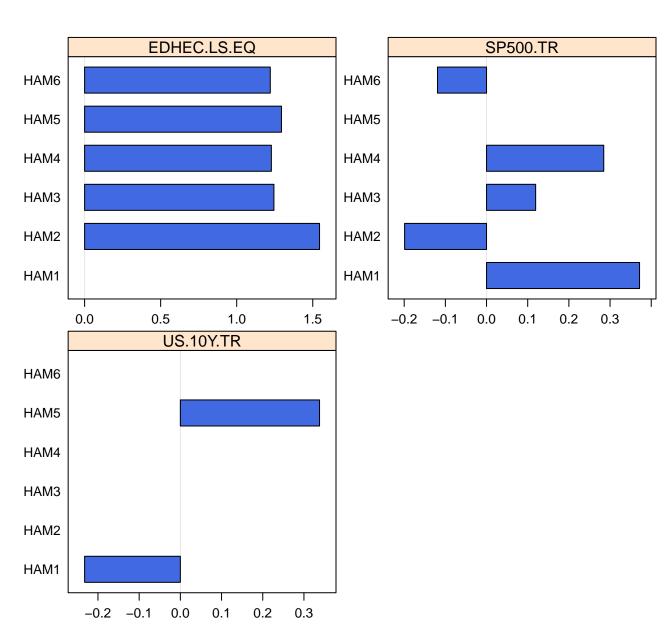


**Residual volatility** HAM6 HAM5 HAM4 НАМ3 HAM2 HAM1 0.02 0.03 0.04 0.01

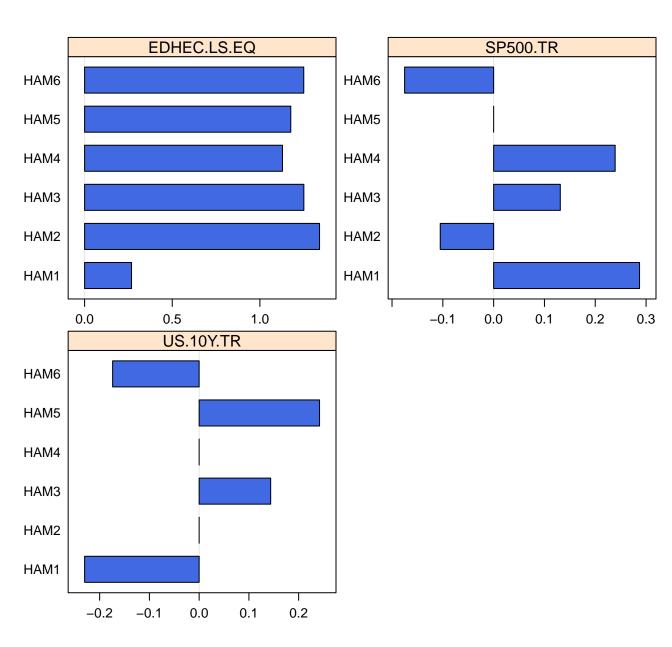
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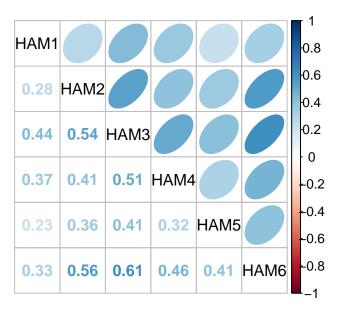


## **Factor model Betas**

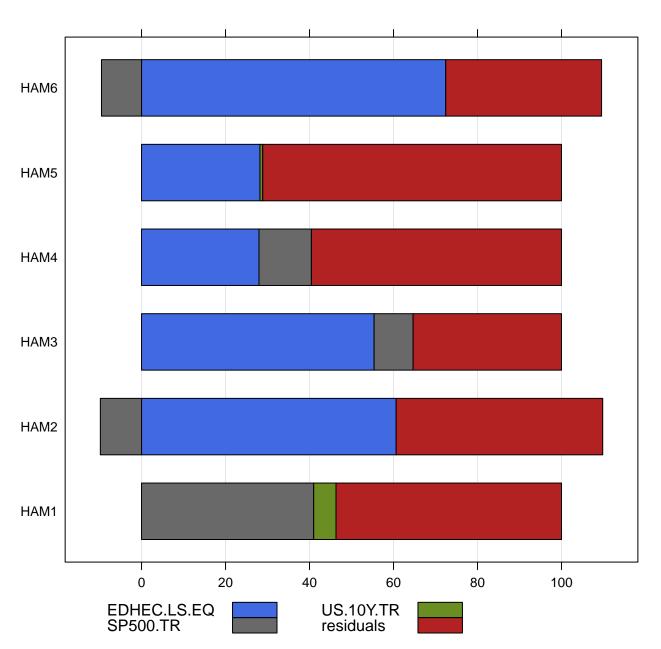


## **Factor model Betas**

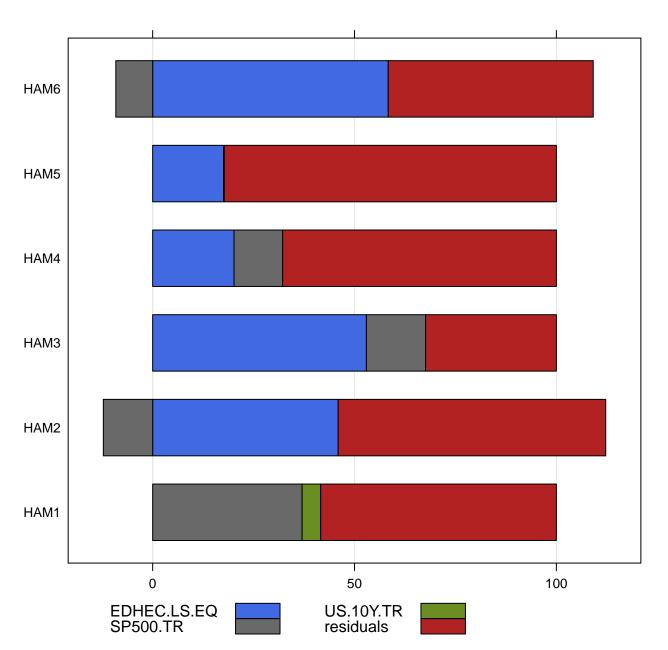




**Factor % Contribution to SD** 



Factor % Contribution to VaR



**Factor % Contribution to ES** 

