

Instructions for Model Validation assignment

You are going to validate VaR model of your peers. Please follow closely the validation structure as described by Erik Kooistra, slides 10 and 18.

Each group must provide to their validators two files: the report which includes the recommendation on the choice of the preferred risk model, and excel spreadsheet containing historical data used for the Assignment 1. The data has to be synchronized by date and should contain either prices/rates themselves (preferred) or already risk factor changes so logreturns and yield changes.

For now, we ignore the regulation and take our Assignment 1 description as “regulation”, in terms of VaR and ES horizons and confidence levels.

What is in scope of validation:

Documentation: for sure

Theoretical Assessment: briefly, check loss operator/linearized loss operator derivations

Quantitative Assessment: this is the main part. Main focus is on VaR (although feel free to include ES in validation) and the recommended risk model – this is the one that needs to be validated. Purpose of validation is two-fold: first, establish whether the results are adequate in terms of exceedances and second, whether the results are replicable. Give your assessment on both counts.

Scope and use as well as Maintenance Review: we skip.

Limitations: for sure, list them if there are any. Feel free to use the most recent prices during coronavirus period to establish whether validated model can cope with that.

Final validation result: red (model not replicable / not fit for use and why), yellow: model is fit for use but there are some more or less significant issues (list them) or green (model fit for use, no issues or only minor issues – list them).

Length of validation report: keep it short, 3-4 pages. Include your own analysis in terms of VaR violations etc, alongside the ones reported in the original report.