

FAKULTÄT FÜR BETRIEBSWIRTSCHAFT

Guidelines on "measures taken to save the research data used in the dissertation"

The following guidelines will give you some advice on how to store the research data used in a dissertation. Each research area has its own requirements and the procedure on how to treat the data often depends on the individual data.

How is research data defined?

Research data is raw data and its different processing stages; simulation data; observation data; data from interviews; software; models; programming codes.

What do we understand by research data management?

The preparation, storing and publishing of research data. Reasons therefore are – among others – the <u>Statutes to ensure good scientific practice and avoid scientific misconduct at the University of Hamburg [PDF]</u>

What information should be included in your "concept on how to save research data used in the dissertation"?

Guiding principle: unless there are legal reasons, you should document in written all sources, raw data and history of the research data processed as well as the evaluation files you used in your dissertation. They should be stored in order to enable replication of the outcome by a third party.

Data set description

- From which source did you receive the data?
- In which analyses did you use the relevant data in your dissertation?
- Which is the data structure (e.g. units, codes...)?
- Which method of data recruitment or measurement did you use?
- Is it raw data or processed data?
- In case of processed data: which processing steps did you follow and which program did you use for this?

Own programming codes:

- Which programming codes refer to which analyses?
- How did you ensure replicable use by a third party (e.g. comments in the programming code)?

Where and how do you store and save the data?

- a) Place of data storage:
- UHH network drives: procedure in case you end your work prematurely?
- Repository for research data management at UHH (https://www.fdm.uni-hamburg.de/en/fdm.html)
- Specific repositories for specialized research data?



FAKULTÄT FÜR BETRIEBSWIRTSCHAFT

- b) Type of storage:
- Does the type of data format allow third parties to re-use the data (for a long term)?
- Did you save programming codes resp. data sets together with long-term saving formats used in the program (e.g. .txt, .csv ...)?
- Which directory and names did you use for files and folders?

Please note:

According to the <u>Statutes to ensure good scientific practice and avoid scientific misconduct at the University of Hamburg [PDF]</u>, you must store primary data, which you collected for your dissertation work for ten years on durable and secure data media within the institution where the data was created, unless special rules provide for an even longer storage. We recommend using the repository for research data at UHH. The storage period starts when you hand in your dissertation at the office for doctoral studies. The data blocks need to be accompanied by a descriptive file (see above section "data set description").

Subsequent use by a third party?

- Is the re-use of the available data by a third part subject to any consent?
- How do you enable a third party to use the data (e.g. repository of research data at UHH)?
- Are Creative Commons Licences an option?

Further assistance

- a) Requirements of journals regarding data safety management and replicability of data (dated): https://www.aeaweb.org/journals/policies/data-code/
- b) Requirements of DFG (German Research Foundation) specified by the Board of Economics (dated in German only): https://www.dfg.de/download/pdf/foerderung/antragstellung/forschungsdaten/fachkolle-gium112 forschungsdatenmanagement de 1811.pdf as well as https://www.ratswd.de/dl/RatSWD Output3 Forschungsdatenmanagement.pdf (in German only)
- c) In addition, the Center for Sustainable Research Data Management at UHH offers open consultation hours and single sessions to clarify unanswered questions.