EUR Data Management Plan

Version 4.6

The template was created by the RDM specialists at UL/EDSC and the data stewards. It has been approved by NWO and ZonMw, and it is also the default DMP format supported by the EUR.

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Guidelines can be found in a separate document (available on the web page of Erasmus Research Services); questions marked with * refer to the guidelines.

GENERAL

Please tick the following boxes if you agree to act according to the following terms:

☒ I will answer all questions truthfully and to the best of my knowledge

☐ I will discuss the data management plan with my research team

☐ I will check and, if necessary, update my data management plan a minimum of once a year

Support[i] in writing a data management plan is available through the faculty Data Stewards (their contact details can be found on the web page of Erasmus Research Services).

If applicable, please provide the name of the support staff (e.g., Research Data Steward, Privacy Officer) consulted and the date of consultation:

Role	Name	Date of consultation
Research Data Steward		
Privacy Officer		

[i]Research funders ZonMw and NWO require all Data Management Plans to be completed in consultation with data management support staff at the home institution of the grant holder in order to be eligible for consideration.

Scientific research must be conducted in line with existing guidelines on good research practices and integrity. Please tick the boxes if you have read and understand these guidelines and will act accordingly.

☒ The Netherlands Code of Conduct for Research Integrity (VSNU, 2018)

OR

☒ The European Code of Conduct for Research Integrity (ALLEA, 2023)

ADMINISTRATION & PROJECT DESCRIPTION

This section of the DMP provides an overview of who is involved in the project, the research topic, research question(s) and methodology, and tracks the version of the DMP. This information serves as a reference for interpreting choices made in the subsequent sections of the DMP.

1. Provide the details of your project

Project title	Stationary or non-stationary? An investigation on the initial conditions for panel maximum likelihood estimation.
Project start date as intended	1 February 2025
Project duration in months as intended	7
Funding body (if applicable) *	-
Grant number (if applicable)	-
Date of DMP version 1	30 June 2025
Date and version of current DMP	**Date:** **Version:**

2. List the names and affiliations of all members of the research team. List the researcher responsible for research data management first. For PhD projects, please indicate the Promotor(s) and/or Daily Supervisor(s) with a (!)

Name	Email	ORCID	Research Institution

3. Briefly summarize the project background and research question(s) to help others understand the purpose for which the data are being collected or created:

Purpose of the research question is to derive theoretical properties of the First-Differenced Maximum Likelihood estimator for dynamic panel data. The theoretical properties are tested by using a Monte Carlo study.

4. **Specify the research type and briefly describe the methodology, how the data will be collected, and the tools used for data collection, processing and analysis:**

The research itself will be theoretical in nature. The theoretical findings are then confirmed using a Monte Carlo study. This involves the simulation of various data structures to test the theoretical hypothesis.

Example: observational cohort, all participants will fill out three online questionnaires through the survey platform Qualtrics. Some of the participants will be invited for semi-structured interviews that will be video-recorded via Microsoft Teams.

5. **Are additional (financial or time) resources required for data management in this project?**

☒ No, I will use the services and resources provided by the EUR

☐ Yes – please specify:

Example: 5% of the budget is reserved for data management costs not covered by the EUR. This includes extra staff time and additional training, as well as funding for non-standard tools or services, for example transcription tools. Furthermore, we may need to pay for additional storage space.

PREPARATION: LEGAL ARRANGEMENTS AND POLICY

Legal arrangements and policies are the backbone of research: without a legal base, research involving research participants would not be possible and entering a partnership without a contract is unwise.

6. With whom will you need to make legal arrangements?*

☒ With nobody / No reason → *Go to Q8*

☐ With research participants

☐ With third parties

☐ With multiple research partners

☐ I do not know → *Go to Q8*

7. List the agreements that <u>you will initiate</u> and with whom you will make them.

Who	Type of agreement

Example: Research Participants	Informed Consent
Example: Multiple research partners	Consortium Agreement

8. List the agreements or other data management policies that you need to uphold but <u>did not initiate</u>. If you are reusing existing data, list the terms of use under which you may re-use them.

Who	Type	Version and date

Example: EUR	RDM policy of Erasmus University Rotterdam	Version 1.0 [August 14, 2020]
Example: NWO	Funding Agreement	Version 11.4 [July 11, 2018]
Example: EUR	Internet and ICT facilities policy	[July 13th, 2021]

9. Do you need to obtain ethical approval for your research project?*

☒ No, my project does not require ethical approval

☐ Yes, I am preparing to submit my application

☐ Yes, I have submitted my application

☐ Yes, I have obtained ethical approval

☐ I do not know

10. If you have obtained ethical approval, list the reference number:

DURING RESEARCH: COLLECTING AND ANALYZING

This section focuses on your research data during your research project and aims to help assess whether all tools and protocols needed are in place.

11. Specify what data you will be collecting and indicate format, estimated size, and whether this is data that you will be generating or existing data that you will be re-using.*

Type	Data Classification	Format	Estimated size[i]	Generate or Reuse
Observational data from an AR(1) model with various assumptions on the initial conditions and homo- and heteroskedastic variance.	Internal	.py	< 1 GB	Generated

Example: Digital survey data	Internal	.csv	1-5 GB	Generate
Example: Audio-recorded interviews	Confidential	.mp3;	5-10 GB	Generate
Example: Interview transcripts	Confidential	.docx/.odt	< 1 GB	Generate
Example: Dutch Central Bureau of Statistics (CBS) microdata	Secret	.csv	10-50 GB	Re-use
Example: Public documents of companies	Public	.pdf	<1 GB	Re-use

12. Will you be collecting or re-using (sensitive) personal data? *

☒ No – My research does not include human participants

☐ No – My research involves human participants, but I will collect or re-use fully anonymous data

☐ Yes – Personal data that is non-sensitive → *Consult your faculty's Privacy Officer*

☐ Yes – Personal data that is sensitive → *Consult your faculty's Privacy Officer*

☐ I do not know → *Consult your faculty's Privacy Officer*

13. If you collect or re-use (sensitive) personal data, how will you protect the privacy of participants? *

☐ I will fully anonymise the data → *Go to Q14*

☐ I will pseudonymise the data → *Go to Q14*

☒ Not applicable – I do not collect or re-use personal data → *Go to Q15*

☐ Not applicable – I have participants' consent (e.g. oral history research) → *Go to Q15*

☐ I do not know → *Consult your faculty's Privacy Officer*

14. Please elaborate on your anonymisation/pseudonymisation plans. If you are working with multiple datasets, please specify which datasets will be anonymised and which will be pseudonymised.

Example: Digital survey data will be anonymised, while interview transcripts will be pseudonymised.

15. Will you be collecting or re-using non-personal sensitive data?

☐ Yes (e.g. confidential company data, data related to national security)

☒ No

16. Where will you store your data <u>during</u> the project?* You can select multiple options.

☐ I do not know → *Go to Q18*

☐ EUR SURF Yoda (preferred storage solution for research data) → *Go to Q18*

☐ EUR SURFdrive → *Go to Q18*

☐ EUR SURF Research Drive (for collaborations) → *Go to Q18*

☐ EUR Document Vault (for secret data) → *Go to Q18*

☐ EUR OneDrive → *Go to Q18*

☐ EUR Teams/Sharepoint → *Go to Q18*

☐ EUR Video for Research (Beats) → *Go to Q18*

☒ Other – please specify:

The code is stored in the cloud on Github.com

Example: Google Workspace for Education

17. Is this other software tool supported by the EUR or is it private?

☐ EUR supported

☒ Private

☐ I do not know → *Contact your faculty's Data Steward*

18. What hardware and software do you use?* Select all applicable options.

☐ EUR supported hardware (e.g. @wEURk laptop, @wEURk workstation)

☒ Private hardware (e.g. personal laptop, private external hard drive)

☐ EUR supported software as found in the software catalog

☐ Private software or freeware (e.g. private Dropbox)

19. If you use private hardware, software, or freeware, please specify what and for what reason:

I do not have a university laptop, so I am using my own device.

Example: During fieldwork I have no access to internet, so I temporarily store my data on an encrypted external drive.

Example: I do not have an EUR laptop, so I am using my own device.

20. Are regular backups made of your data*?

☐ I do not know

☐ No

☐ Yes, I use only EUR supported tools [as listed in Q18], thus to a limited extent backups are made automatically

☒ Yes, manually – please specify:

Git provides regular backups of the code.

Note: Include who makes the backups and how often backups are made

21. Who manages access to the data?

☐ I have not yet discussed this with the research team

☒ Researcher responsible for research data management

☐ Other – please specify:

22. Who will have access to the data (during the project)?

☐ I have not yet discussed this with the research team

☒ Only researchers as indicated under 'Administration & Project description'

☐ Other researchers at the department or faculty

☐ A third party involved in my research – please specify:

☐ Other – please specify:

23. How are you going to make sure your data will be accessible in case of staff changes, illness, etc.?*

☒ I have not yet discussed this with the research team or checked with my department or faculty

☐ I have discussed it with the research team, I am working on the documentation

☐ There is a clear procedure in place in my research team, department, or faculty

☐ Other – please specify:

24. Have you and your research team agreed on a way to structure and name project folders and files?*

☒ No – I have not yet discussed this with the research team

☐ Yes – I am working on the documentation

☐ Yes – And I have documentation on it

25. Have you and your research team agreed on how to handle versioning of files?*

☒ No – I have not yet discussed this with the research team

☐ Yes – I am working on the documentation

☐ Yes – And I have documentation on it

RESEARCH PUBLICATION: DATA SHARING AND RE-USE

When we speak about *data sharing* and *re-use of data*, this primarily relates to creating a data package of the data that our publications are based on. This data package may be used for verification, replication, or new studies. While it is typically placed in a publicly accessible data repository, note that if needed, it can be set to restricted access or under an embargo, thus not be publicly accessible**.**

26. What data (and code) will be shared in a research data repository?

☒ I do not know

☐ All data (and code) underlying published papers / reports → *Go to Q28*

☐ All data (and code) produced in the project → *Go to Q28*

☐ A selection of the data (and code) → *Go to Q27*

☐ I cannot share the data (and code); I will share the metadata and research materials → *Go to Q27*

27. Please specify why you are unable to share (all) data (and code).

The code will be available upon request.

Example: Contractual obligations, privacy law

28. List the data (and code) that you plan to share in a research data repository. Also list the information / documentation / metadata that you will include to make the data package self-explanatory and re-usable in the future (for other researchers and yourself)*

Data	**Format**	**Size**
Thesis_code	.py	<1 GB

Example: Anonymised survey data	.csv	<1 GB
Example: Code	.py, .R	<1 GB
Example: Codebook, Blank questionnaire	.pdf	<1 GB
Example: readme text file (general description of the data, incl. date of collection, selection procedure of participants, tools used to collect the data, etc.)	.txt	<1 GB

29. In which repository will you place the metadata, data, and/or code associated with your paper?*

☒ I do not know

☐ EUR Data Repository (EDR)

☐ Zenodo

☐ DANS Data Stations

☐ Open Science Framework (OSF)

☐ 4TU.ResearchDATA

☐ Dataverse

☐ Other – please specify:

30. What metadata standard will you use to document your research?*

☒ I do not know

☐ None

☐ DCMI (Dublin Core Metadata Initiative) Note: Default within the EUR Data Repository

☐ DDI (Data Documentation Initiative)

☐ SDMX (Statistics Data and Metadata Exchange)

☐ Other – please specify:

31. Will you place any restrictions on re-using the data you plan to share?

☐ I do not know

☒ No → *Go to Q34*

☐ Yes, temporary restrictions – Embargo period → *Go to Q32*

☐ Yes, permanent restrictions – Restricted access → *Go to Q33*

32. Please specify the embargo period:

33. Please specify the conditions under which data with restricted access may be accessed and re-used:

34. Under which license will you make your data and/or materials available for re-use?*

☒ I do not know

☐ Creative commons (e.g. CC0 or CC-BY) → *Please, specify in Q35*

☐ License for specific types of data (e.g. software license) → *Please, specify in Q35*

☐ Other → *Please, specify in Q35*

35. Please specify which license:

AFTER RESEARCH: ARCHIVING

Archiving data for the long term is part of RDM policy at EUR to ensure scientific integrity, it is also often required by a research funder. This generally means that after the project has finished, all project data needed to verify the findings should be stored for the long term (usually a minimum of 10 years). The archived files are typically encrypted before storing and not accessed unless in case of emergency (or after the archiving term has expired).

36. You may be obliged to destroy some data before archiving. Do any of such obligations apply to you?

☐ I do not know

☒ No

☐ Yes - Contractual obligation (e.g. licenses)

☐ Yes - Commercial objectives

☐ Yes - Privacy law (e.g. personal data of participants)

☐ Yes - Other - please specify:

37. List the data and all documentation you will be archiving. These data constitute your archival package.

Data	Format	Size
Thesis_code	.py	<1 GB
Data Management Plan	.pdf	< 1 GB

Example: Informed Consent forms (signed)	.pdf	<1 GB
Example: Raw data	.csv, .docx, mp3, mp4	5-10 GB
Example: Processed data	.csv, .odt, .mka	1-5 GB
Example: Questionnaires	.pdf	<1 GB
Example: Contracts & Terms of use	.pdf	<1 GB
Example: Data Management Plan	.pdf	<1 GB
Example: Grant application & project description	.pdf	<1 GB
Example: Ethical review application & approval document	.pdf	<1 GB

38. Where will you be archiving your data?

☐ I do not know

☐ EUR Yoda Vault (EUR Archive) [retention period min. 10 years] → *You have reached the end of the DMP*

☒ Other – please specify the name and identifier:

39. Please list the name of the archive and link to the archive

Name of archive	Retention period	Link to the archive
Github	n.v.t.	https://github.com/CptWaffle/Thesis-repo