Research Data Preservation

Brett Currier, Bommae Kim, Cynthia Edwards,
Courtney Butler

NDSA: DigiPres

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Brett D. Currier

Digital Scholarship Librarian & Library Manager
Center for the Advancement of Data Research in
Economics

Federal Reserve Bank of Kansas City

The views expressed herein are solely those of
the author and do not necessarily reflect the
views of the Federal Reserve Bank of Kansas
City or the Federal Reserve System.

Objections to Content Recruitment

- Legal Objections
 - Copyright
 - Contract
 - IRB
- Suitability of Compiled Data and Code for release

Why create recommendations?

Looking for De facto Recommendations

Subset

- Top 250 journals from combined select Web of Science categories
(250 total)
 - Top 20 journals from individual select Google Scholar Metrics categories
(271 total after de-duplication)
 - Top 250 journals from IDEAS/RePEc
(250 total)
 - All journals with at least one FRBKC interaction (publication or service)
(152 total)
 - **923 journal titles in subset**
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Select Categories

Google Scholar Metrics

- Accounting & Taxation
- Business, Economics & Management (general)
- Development Economics
- Economic History
- Economic Policy
- Economics
- Entrepreneurship & Innovation
- Finance
- Game Theory & Decision Science
- Human Resources & Organizations
- International Business
- Marketing
- Strategic Management
- Tourism & Hospitality
- Probability & Statistics with Applications

Web of Science

- Agricultural Economics & Policy
 - Business
 - Business, Finance
 - Economics
 - Industrial Relations & Labor
 - Management
 - Statistics & Probability
-

Additional Selection

- Cross-referenced all four sources, included any journal that appeared more than once
(220 journals)
 - Added remaining journals in top 50 from Google Scholar Metrics, IDEAS/RePEc, and Web of Science
(20 journals)
 - Added remaining journals with 2+ FRBKC interactions
(5 journals)
 - **245 journals before exclusions**
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Exclusions

- 9 exclusions
 - Journals that were not peer-reviewed
 - Journals that did not accept articles relating to data/economics and related disciplines
 - Journals no longer in print
 - Federal Reserve publications
 - **236 journals in final sample**
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Text Analysis

- Identified and downloaded journal policies, author instructions or guidelines, and style guides from journal website(s)
 - Analyzed text to identify inclusion in 2 categories:
 - Data Availability or Replication Policy
 - Supplemental File Recommendations or Requirements
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Supplemental File Recommendations or Requirements*

Recommendations or requirements, including:

- Restrictions on file format, size, or specifications
- File Naming Conventions
- Defining data or code for the supplemental file

Included even if these features were entirely optional

*Includes tables, figures, and other paper components containing data

Results

- 80 journals (34%) have a data availability or replication policy
 - 190 journals (81%) have some recommendation or requirement for supplemental materials
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Archival Standards

- 10 year half life
 - 181 journals (77%) have guidelines consistent with preservation standards
 - Cross referencing against:
 - Library of Congress
 - National Archives
 - Smithsonian
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Preliminary Recommendations

Computer Code

Category	Recommendation
Format	Still determining
Which code?	Programs used to run the final models Intermediate program files Computer program or code used to convert the raw data into the final dataset used in the analysis plus a brief description that enables other researchers to use this program
Copyright Notices	See the Fed License
Licensing Terms	See the Fed License

Computer Code

Category	Recommendation
Author Contributions Checklist	Abstract
	How Delivered (R package, Shiny, etc.)
	License information
	Link to code
	Version Information
	Hardware Requirements
	Supporting Software requirements

Data

Category	Recommendation
Data definition	Data sets used to run the final models Intermediate data files (Optional) Raw data files (Reproducible)
File Format	CSV
Public (but Proprietary) Databases	A precise description of the databases from which the data was drawn How the propriety data can be obtained by others
Data File Layout	Variables and commands should be clearly labeled
Copyright Notices	See the Fed License
Licensing Terms	See the Fed License
File Size	20 Gigs

Experimental Papers

Additional Documents	Additional Documents
Sample images of any advertising stimuli used;	Provide the instrument
Screen-capture of any computer interface used;	Results of pilot tests
Pertinent details about the procedure (e.g., instructions, filler task);	Results of earlier experiments
Additional details about the method, analyses and results as indicated in the appendix to this document	Describe Experimental instruments
Flowchart of the data collection instrument	Describe experimental collection procedures if data is collected by a third party
Interviewing Guide	Original instructions
Coding Instruments	Information regarding subject eligibility or selection
The subject pool and recruiting procedures.	Methodological Details Appendix
The experimental technology – when and where the experiments were conducted; by computer or manually;	Full phrasing of the questions and scales used for the reported findings;
Any procedures to test for comprehension before running the experiment, including the use of practice trials and quizzes	Full text of any scenarios or vignettes used;

Experimental Papers

Additional Documents	Additional Documents
Detailed statement of protocols	Matching procedures, especially for game theory experiments
Samples of permission forms and record sheets	Subject payments, including whether artificial currency was used, the exchange rate, show-up fees, average earnings, lotteries and/or grades
Copies of instructions and slides and/or transparencies used to present instructions	The number of subjects used in each session and, where relevant, their experience
Source code for computer programs used to conduct the experiment and to analyze the data	Timing, such as how long a typical session lasted, and how much of that time was instructional
Screen shots showing how the programs are used	Any use of deception and/or any instructional inaccuracies
The experimental data together with adequate documentation of the format	

Figures, Images, Tables, Screenshots

Category	Recommendation
File Names	Should include the Figure Name and number according to their sequence in the text
Resolution	300 – 1200 DPI
File Types	Publication standard. No official position GIF, JPEG, PDF, PDF/A, PNG, and TIF
Color Illustrations	The dominant 2 formats are CYMK and RGB and different publications have different standards. Those two standards are CYMK and RGB. Publication standard. No official position
Black and White illustrations	Not RGB color tones
Copyright Notices	See the Fed License
Licensing Terms	See the Fed License

Read Me

Category	Recommendation
Author Checklist	Abstract
	Availability
	Description
	Permissions
	Licensing Information
	Link to data
	Data Provenance
	File Format
	Version Information
	Unique Identifier (DOI)

Read Me

Category	Recommendation
Manifest	<p>A list of all files in the supplement</p> <p>A list of proprietary software required for the file (if relevant)</p> <p>Brief description</p>
File Format	PDF or PDF/A
Timing	5 to 6 years

Next Steps

- Code Annotation
- Data Annotation

Questions