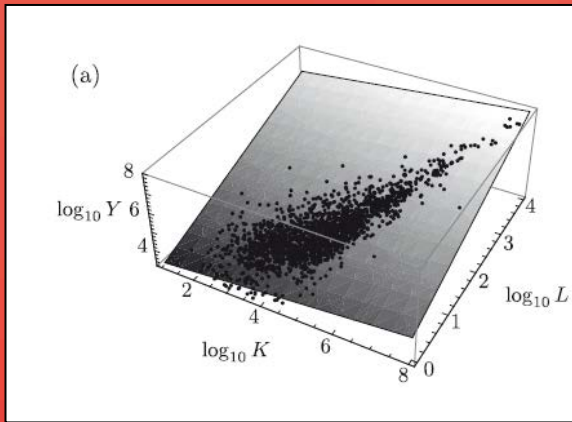


Data policies and data archives as prerequisites of reproducible economic research.



Source: *Economics-EJournal*

The Welfare Effects of Bundling in Multichannel Television Markets (pp. 643-85)

Gregory S. Crawford and Ali Yurukoglu

[Abstract/Tools](#) | [Full-Text Article](#) | [Download Data Set](#) | [Online Appendix](#)

The Use of Full-Line Forcing Contracts in the Video Rental Industry (pp. 686-719)

Katherine Ho, Justin Ho and Julie Holland Mortimer

[Abstract/Tools](#) | [Full-Text Article](#) | [Download Data Set](#) | [Online Appendix](#)

Slow to Anger and Fast to Forgive: Cooperation in an Uncertain World (pp. 720-49)

Drew Fudenberg, David G. Rand and Anna Dreber

[Abstract/Tools](#) | [Full-Text Article](#) | [Download Data Set](#) | [Online Appendix](#)

Source: *American Economic Review*



Source: *Dataverse-Network / ckan..org*

Gert G. Wagner / Sven Vlaeminck

2016/01/04 | 2016 Annual Meeting of the American Economic Association | San Francisco | USA

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 - 3.2 Some specifications these data policies
- > 4. Conclusion and ‚take home messages‘

1. Introduction & Motivation

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EDaWaX
European Data Watch Extended

Max Planck Institute for
Innovation and Competition 

 **DIW** SOEP RatSWD.  **ZBW** Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Changing patterns in economic research

- > Hamermesh analysed 748 articles in economic top journals (published between 1963 and 2011).
- > He found significant changes in the methodology used by researchers:
 - Studies based on borrowed and own data sets, experimental approaches and simulations comprise roughly 80% of all surveyed articles in 2011.*
 - In 1963 this percentage was below 50%.*

* D.S. Hamermesh (2012), Six Decades of Top Economics Publishing: Who and How?
National Bureau of Economic Research, Working Paper 18635

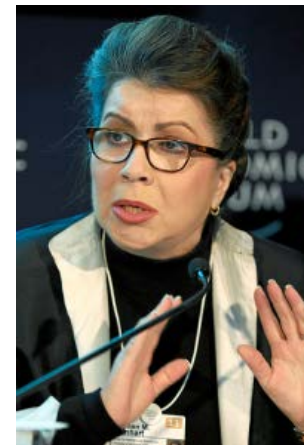
Challenges in empirically-based research

- > 2010: The US top economists Rogoff & Reinhart published a paper on the relation of public debt and economic growth.
- > 2012/2013: EU-Monetary Affairs Commissioner Rehn and US vice presidential candidate Ryan used the results of Reinhart & Rogoff to justify austerity policy.
- > 2013: A student found multiple failures in the calculations and selectively omitted data.

⊗ Strong doubts about Rogoff's & Reinhart's findings



"Dr. Kenneth Rogoff at a Canada 2020 Luncheon" by [canada.2020/flickr.com](https://www.flickr.com/photos/canada.2020/)



"Carmen M. Reinhart - World Economic Forum Annual Meeting 2011" by World Economic Forum/flickr.com

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How do journals in economic sciences react to these challenges?

- > Do we find a large number of journals equipped with suitable data policies?
- > And how are these policies structured? What type of replication files and supplemental information do they request?
- > Do these data policies really foster replicable research?


2. The Study

- > 2.1 Approach & methodology
- > 2.2 Some characteristics of our research sample

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Approach & methodology:

- > Creation of a research sample based on two list of journals provided by German learned societies (in economics & business studies).
- > We carefully checked the webpage(s) of each journal to determine whether it has a data policy or not.
- > We analysed the specifications of each policy we found.
- > We compared the specifications of each policy to some requirements for reproducible research*

* G. King (1995), Replication, replication. *Ps: Political Science and Politics* 28: 443–499.

* B.D. McCullough, K.A. McGeary & T.D. Harrison (2008), Do economics journal archives promote replicable research? *Canadian Journal of Economics* 41, 1406–1420.

>

What we checked

- > What do authors have to provide to satisfy the policy?
 - dataset(s) employed?
 - code of computation (syntax)?
 - self-compiled software components?
 - descriptions of the data (data dictionary/codebook)?
 - > Is the policy mandatory?
 - > Who is responsible to provide the data (author/ journal?)
 - > When do authors have to submit their replication data?
 - > Does the policy have a procedure to foster replication for research based on proprietary/confidential data?
 - > ...
-


2. The Study

- > 2.1 Approach & methodology
- > 2.2 Some characteristics of our research sample

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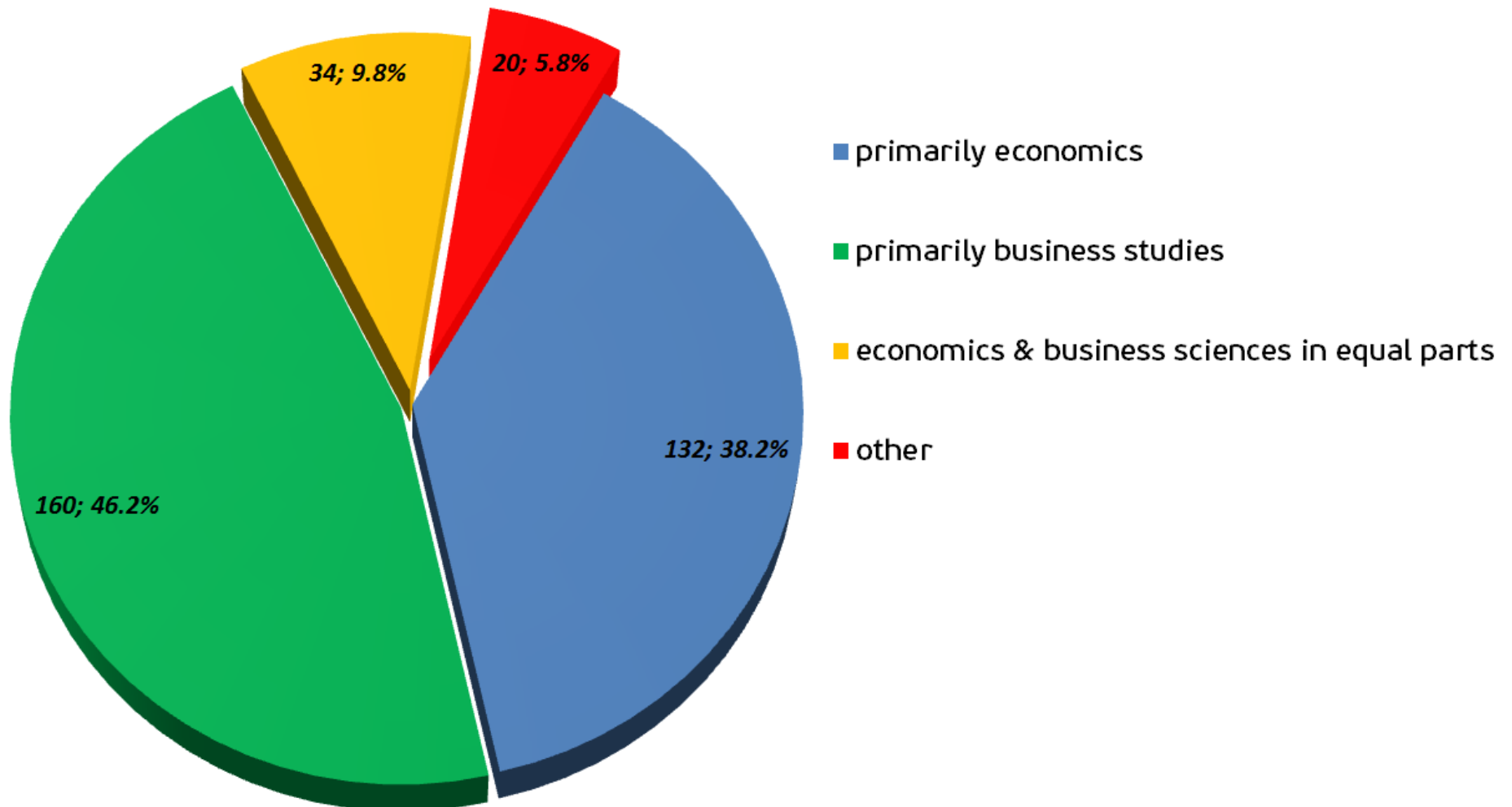
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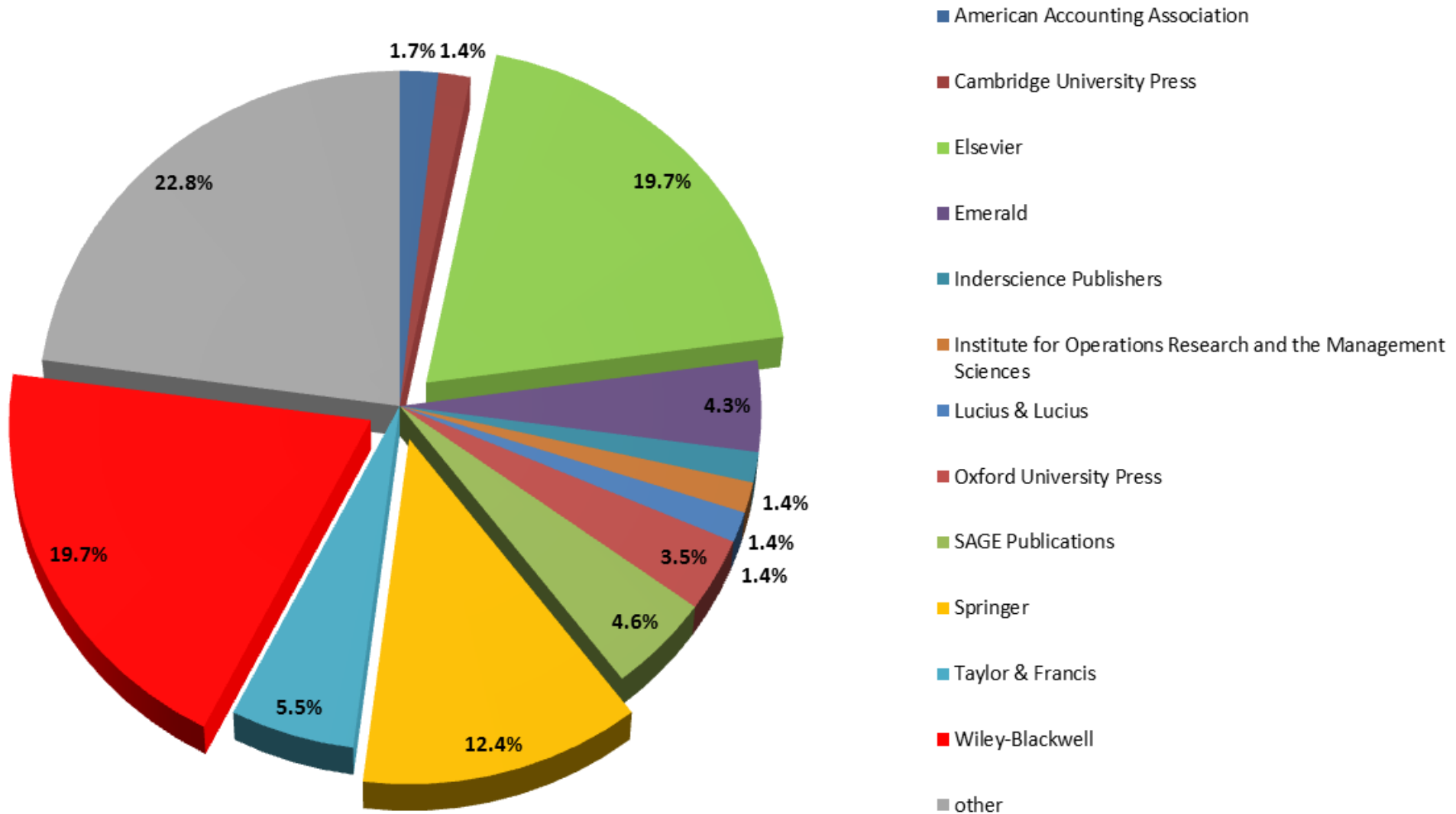
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Primary subject area (n=346)

Primary Subject Area of Journals in our Sample
(n=346)

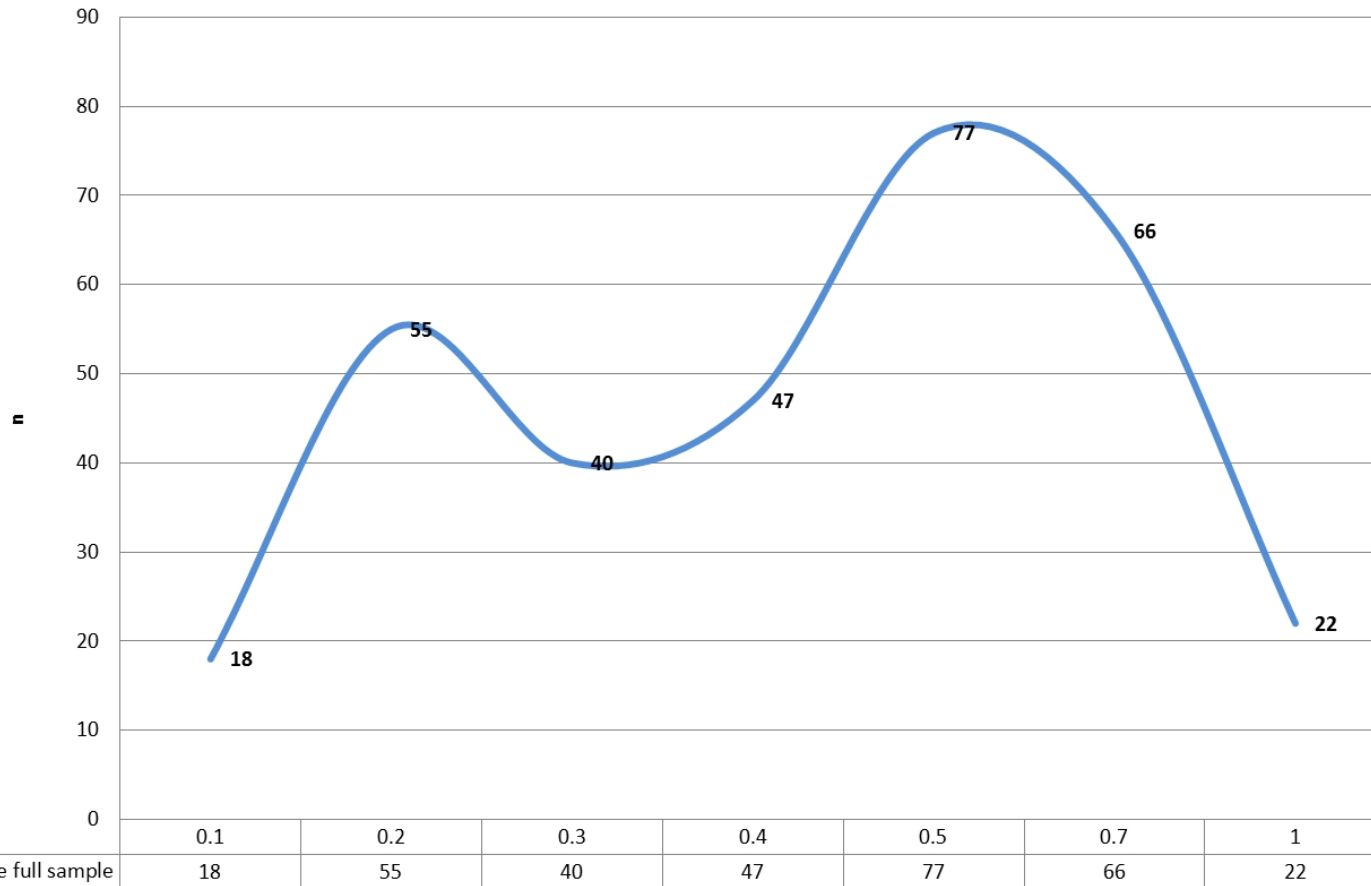


Publishers in sample (n=346)



Distribution of our sample by rating in the Handelsblatt ranking 2012

(n=325)



3. Some results of our study

- > 3.1 The number of journals equipped with data policies
- > 3.2 Specifications of journal's data policies

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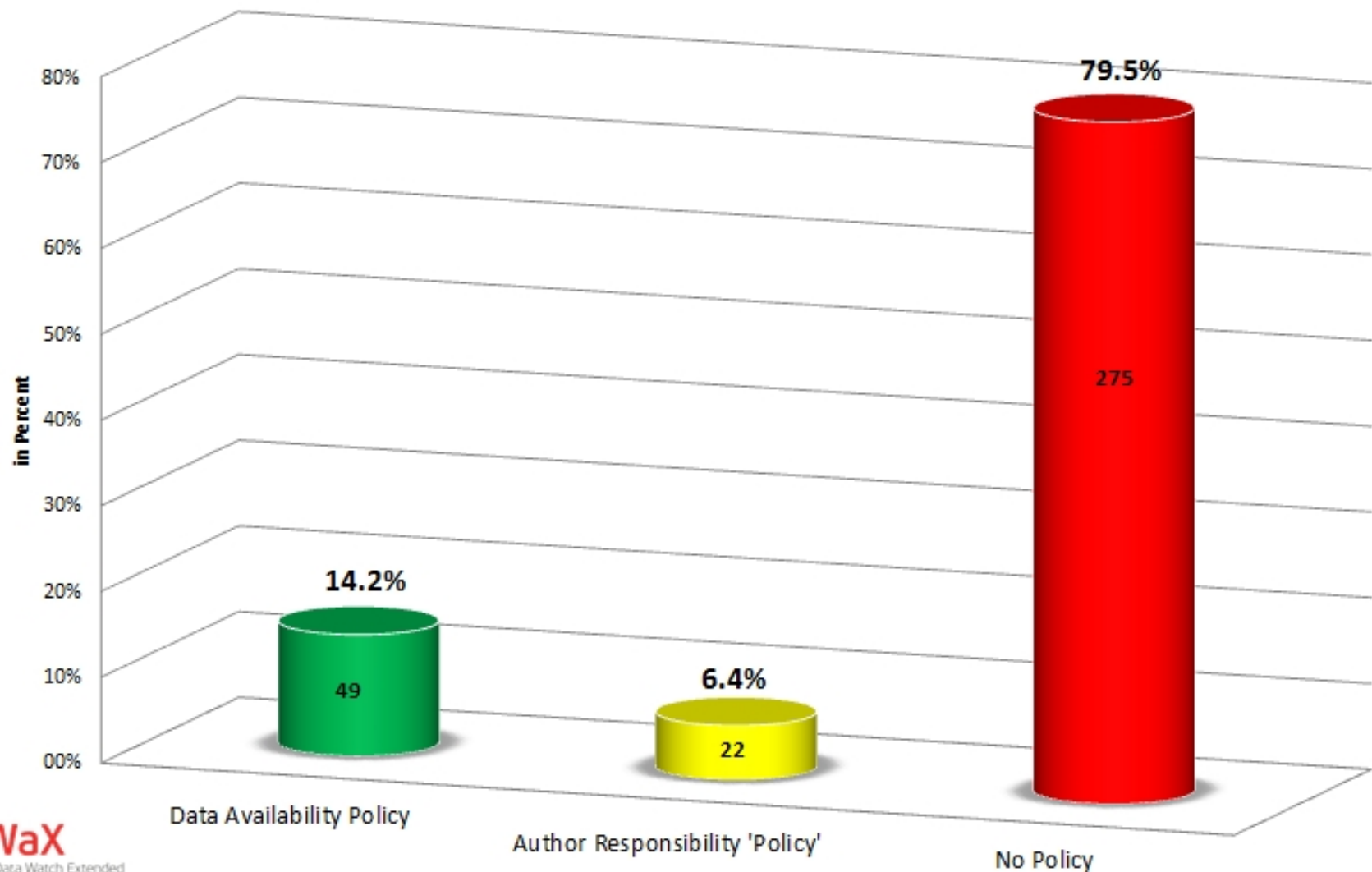
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Data Policies im Sample:

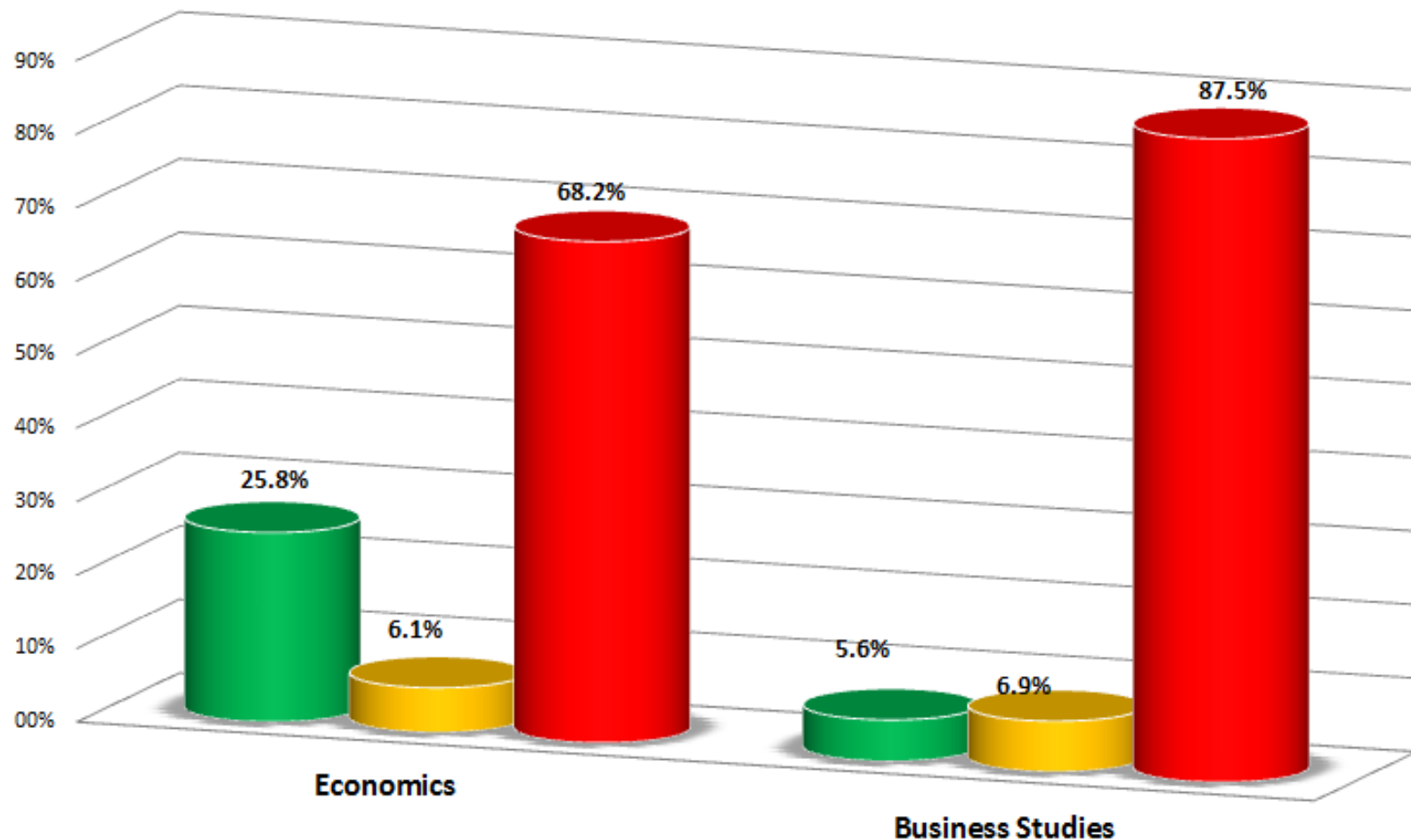
Data Policies in full Sample
(n=346)



Economics & Business studies: Strong differences

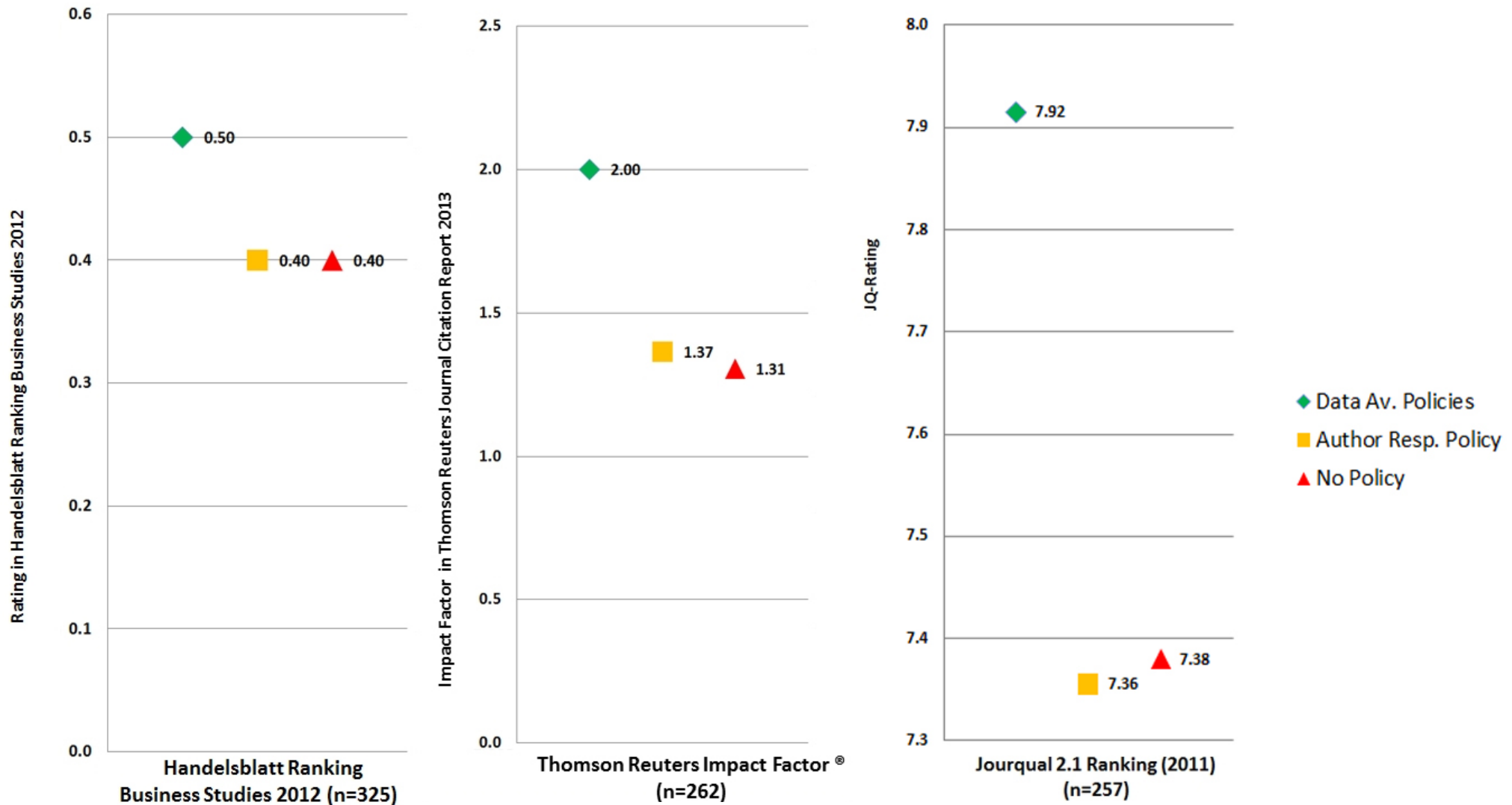
Data Policies of Journals in Economics and Business Studies

(n=293 | Econ: n=132; Bus.Sc.: n=160)



Data policies and journals' rankings

Ranking of journals by type of data policy [median]



3. Some results of our study

- > 3.1 The amount of journals equipped with data policies
- > 3.2 Some specifications of journal's data policies

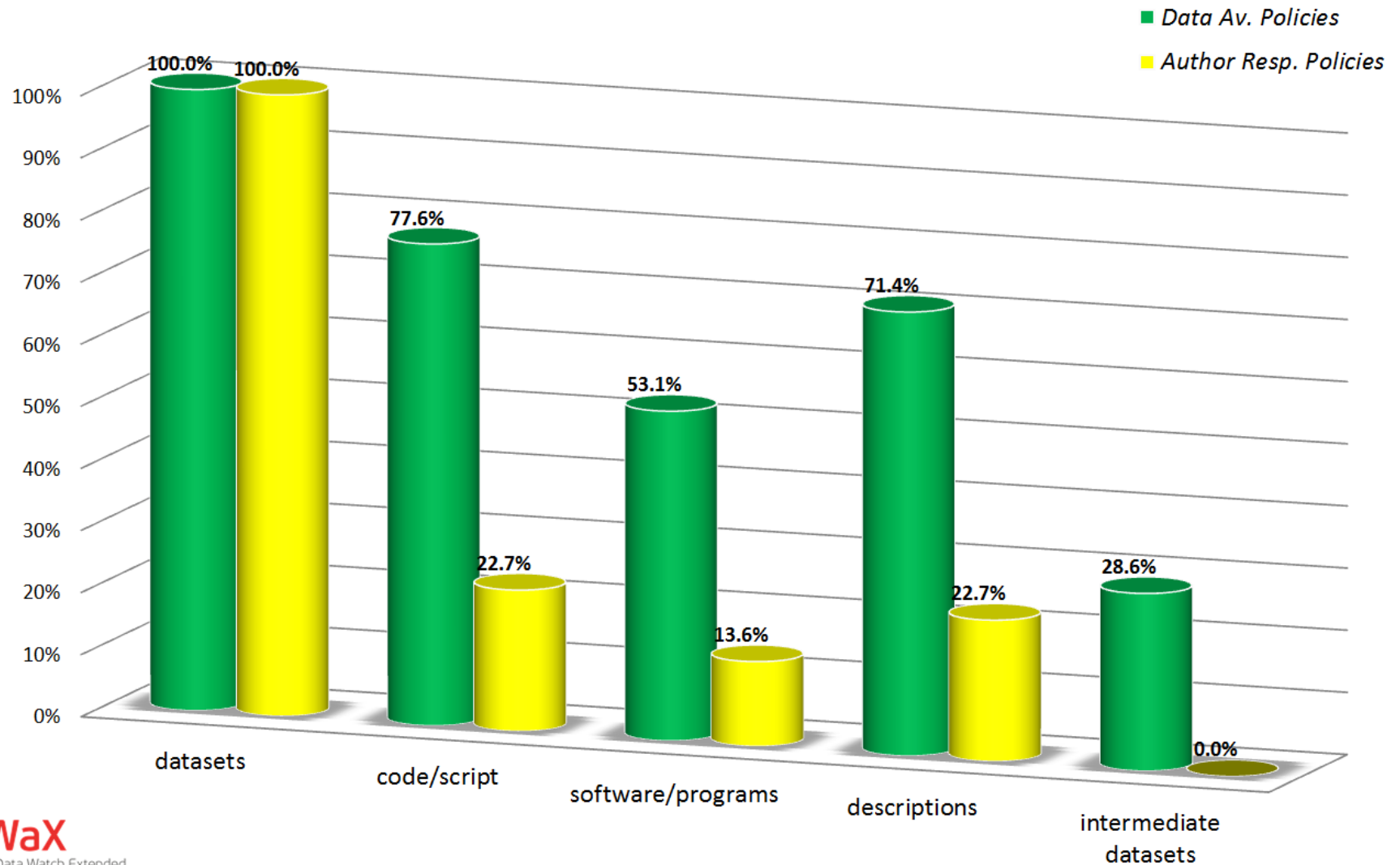
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Requirements of journals' data policies

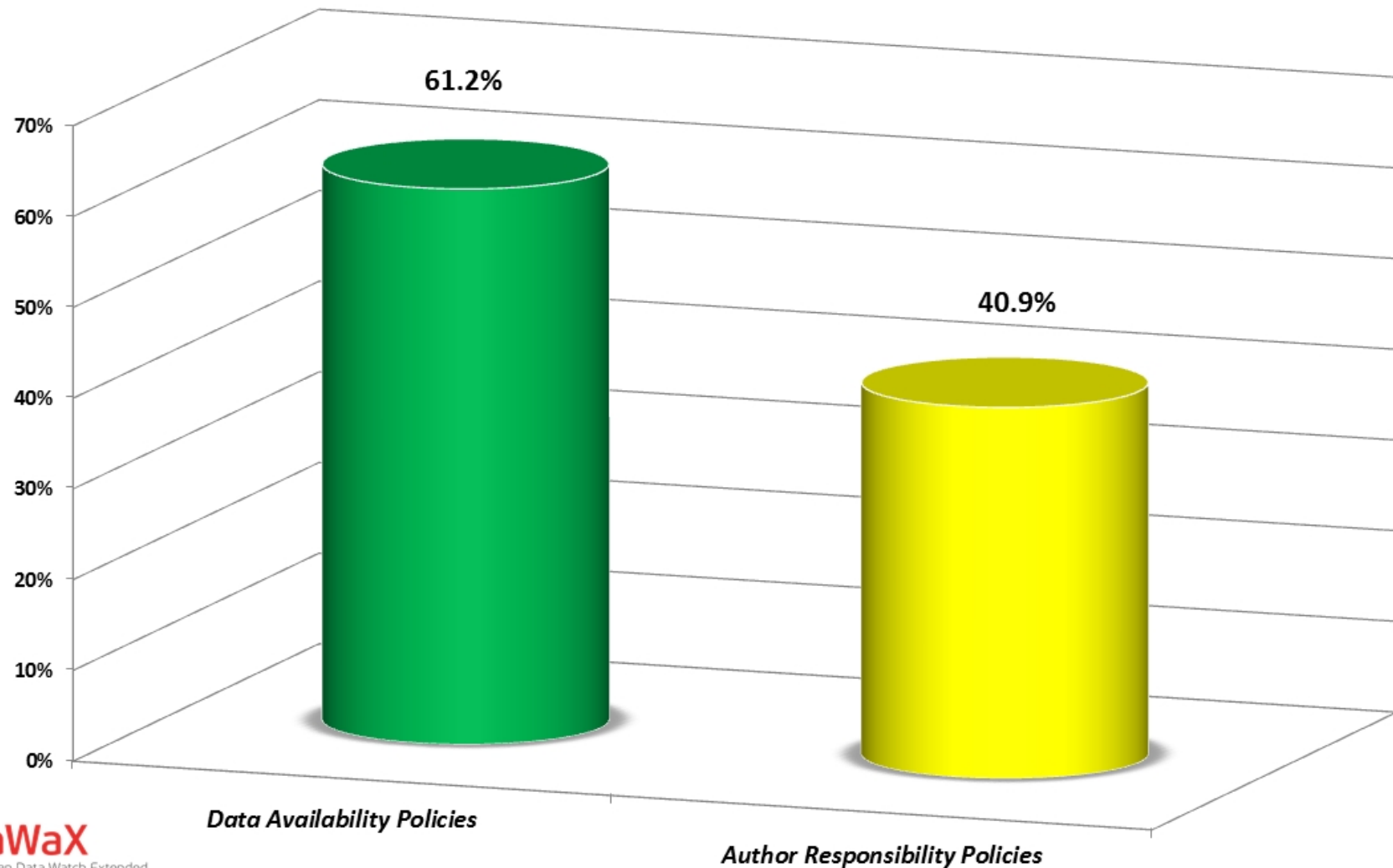
Data Policies: What authors have to provide

(n=71; 49 Data Av. Policies & 22 Author Responsibility Policies)



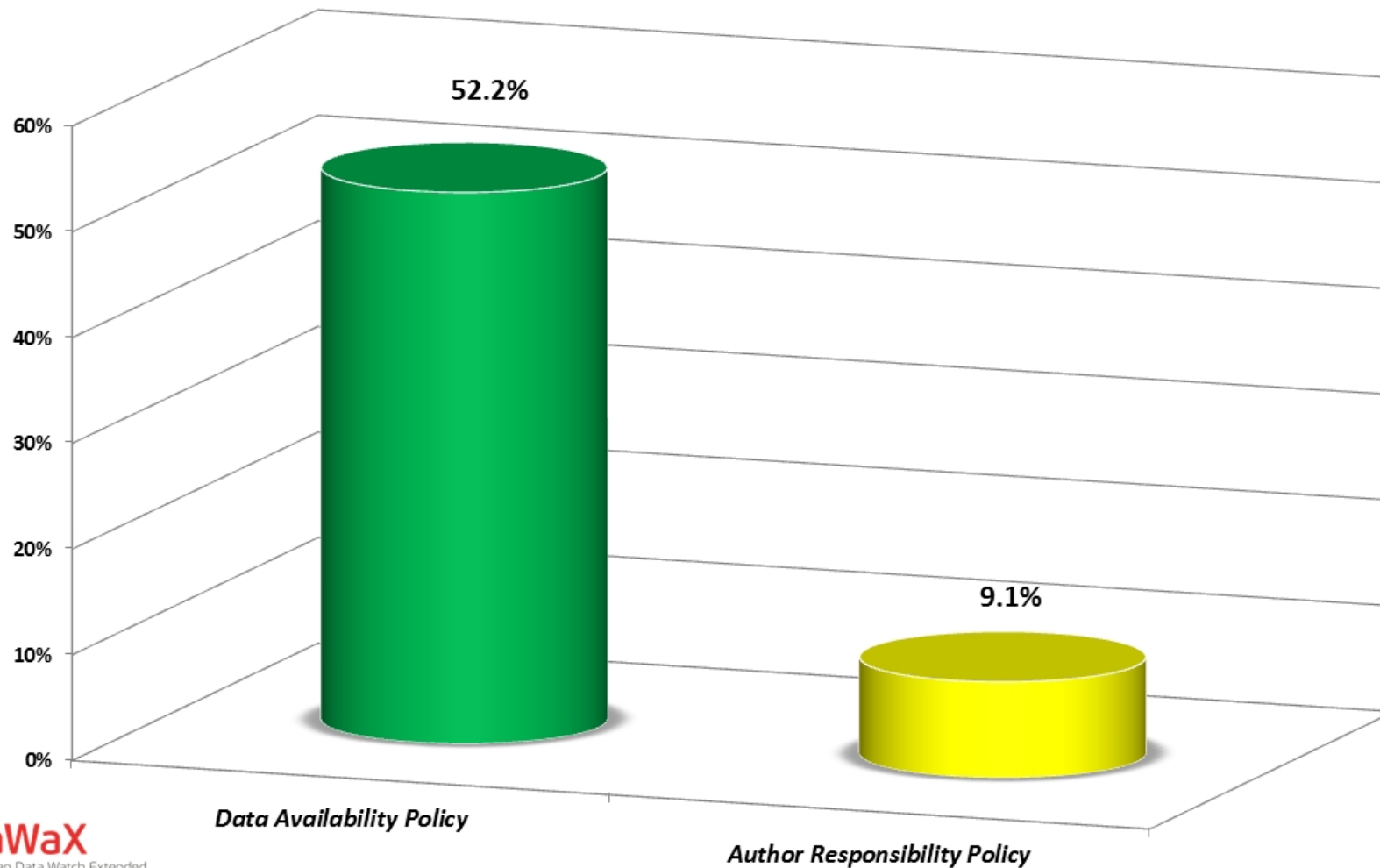
The share of mandatory policies

Mandatory Data Policies in Economic Science Journals
(n=71)



The case of proprietary data

Data Policies: Defined Procedures for Research based on proprietary Data
(n=68)



Results: Data policies' specifications

- > ARPs define far less policy specifications than DAPs = weak policies / „window dressing“
- > The code of computation/syntax is requested by (too) few data policies. The same applies to self-compiled software.
- > 60% of all DAPs are mandatory; not really a satisfactory result.
- > Unfortunately, only half of all DAPs have a procedure to foster replicability also for proprietary/confidential data.
- > Intermediate datasets are required by NONE of the policies; less than a third of all DAPs invites authors to submit these files.

4. Take home messages

- > To date, journals equipped with useful data availability policies still are a minority.
- > But, especially in economics the share of journals equipped with such policies rises (> 25% in our sample).
- > On average, journals with such policies are among the best rated journals in the field.
- > Among data policies, there is light and shadow. To date, many data policies remain weak. But: A „good practise“ policy has been implemented by the American Economic Review (AER).

Thank you very much for your attention!

...do you have questions or comments ?

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