ReplicationWiki - Improving Transparency in Economic Research

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“Research that cannot be replicated is not science, and cannot be trusted either as part of the profession‘s accumulated body of knowledge or as a basis for policy.“ (McCullough/Vinod 2003)
Lack of
- replicable material
- replications

Incentives:
- publications
- avoid conflicts

Our suggestions:
- work with students
- wiki
Teaching cooperation

- University of Toronto
- University of Bonn
- German universities Marburg, Aachen, Gießen, Göttingen, Kassel & Siegen
- Graduate Institute, Geneva
- Nanjing Agricultural University
Findings from the teaching experience

- usually not every result published can be obtained from available material

- steps to go from raw data to those used for final analysis hardly ever available
Examples of why not all results can be replicated

- deviations in number of observations
- missing variables
- dataset unavailable in version used for publication ➔ use DOI!
- software extensions unavailable
- code is missing
- insufficient documentation
Approach for the ReplicationWiki

http://replication.uni-goettingen.de

- database for more than 2,600 empirical studies, mainly from six journals with replication archives 2000-2013

- 324 replications found in the literature
Capital is back: Wealth-income ratios in rich countries, 1700-2010 (QJE)

Article

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<tr>
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<th>Journal</th>
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<td>Thomas Piketty, Gabriel Zucman</td>
<td>Capital is back: Wealth-income ratios in rich countries, 1700-2010 (QJE)</td>
<td>QJE</td>
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Article information

<table>
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<tr>
<th>Program code</th>
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Replication of this study
US-centrism in the literature

of about 1500 studies with information on geographic origin of the data, nearly 900 from the US

UK 59, Canada 39, Italy 29, Sweden 24, Japan 23, China 22, Australia, Kenya and Spain 17, Norway 15, Switzerland 14, Israel 12, Russia six, South Africa five, Greece four
What the Wiki can and what it cannot serve for its documents:
- availability of replication material
- replications found in the literature

No judgement on quality of studies or replications!

Criteria how to categorize studies need to be constantly improved.
Advantages of wiki

- small contributions possible
- use talent of those who are good at improving existing research
- overview of replicability in economics
Usage of the Wiki

So far more than 1.8 million page views, 129 users

- several blogs and media outlets reported

- IDEAS/RePEc links back to study pages that link there

- listed among AEA useful resources for economists

- cited in handbooks and journals, also in political science and empirical law
You can vote which studies should be replicated
How to get more users for the Wiki?

**More content:**

**Expand the database:**
- all major journals with archives
- lab experiments / theoretical studies / business economics, other disciplines

**Guidelines how to**
- prepare replicable material: project [TIER](#)
- write replications ([3ie replication programme](#))
How to get more users for the Wiki?

endorsements of key players:
associations
influential researchers

join with other projects?
How to further improve transparency in social science research

- more comments, corrections, retractions?

- replication editors?

Political Science Replication Blog
Empirical Law
Journal Policies

American Economic Review

[Graph showing the impact factor of a journal from 1996 to 2016]
Journal Policies

Data Policy vs. Impact Factor

5 Year Impact Factor

Data Policy
Journal Policies

Regression analysis: fixed effects model shows data policies correlated with higher citation index
Conclusion and Outlook

data availability policies should be enforced
make them a universal standard
pools of replication editors could lower organizational cost
everyone can be a part of it: register & join!