On the Need for a Replication Journal

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1The views expressed are those of individual authors and do not necessarily reflect official positions of the Federal Reserve Bank of St. Louis, the Federal Reserve System, or the Board of Governors.
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On the Need for a Replication Journal
Strict: Redo previous study to check validity
Definition

Strict: Redo previous study to check validity
Broad: Redo previous study with new data selection or new approach
Strict: Redo previous study to check validity
Broad: Redo previous study with new data selection or new approach
Not only empirical studies, but also experiments and simulations
Publishing in the age of Internet

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On the Need for a Replication Journal
A journal article is
A journal article is

- a historical record of the research frontier
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- a historical record of the research frontier
- an advertisement for a study
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The true value is in the working paper, the dataset and the computer code
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Few journals require this, or require this well
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- a historical record of the research frontier
- an advertisement for a study

The true value is in the working paper, the dataset and the computer code

Few journals require this, or require this well

Replication provides validation, esp. when code and data are missing
How common are replications?

STEM: Very
Social Sciences: Rare
Humanities: Non-existent
Why?

STEM: Short papers, quick pre-publication refereeing, focus on post-publication replication
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Humanities: Long papers, lengthy refereeing, little data, narratives, case studies
STEM: Short papers, quick pre-publication refereeing, focus on post-publication replication
Social Sciences: In between
Humanities: Long papers, lengthy refereeing, little data, narratives, case studies
What about economics?
What about economics?

Lengthy refereeing
What about economics?

Lengthy refereeing
Complex, long, yet incomplete papers
What about economics?

Lengthy refereeing
Complex, long, yet incomplete papers
Costly replication, not happening before or after
What about economics?

Lengthy refereeing
Complex, long, yet incomplete papers
Costly replication, not happening before or after
Little culture of sharing code and data
The **sharing** culture problem
Importance of dataset discovery or creation
The sharing culture problem

Importance of dataset discovery or creation
Large fix cost of coding
Importance of dataset discovery or creation
Large fix cost of coding
Fear of being overtaken (long time to publication)
Importance of dataset discovery or creation
Large fix cost of coding
Fear of being overtaken (long time to publication)
Few datasets are cited properly
The replication culture problem
Very few replication studies are published
Very few replication studies are published
Editors do not care
The replication culture problem

Very few replication studies are published
Editors do not care
Implicated authors despise them
The replication culture problem

Very few replication studies are published
Editors do not care
Implicated authors despise them
Negative incentive
Editors do not like to have their decisions doubted
Editors do not like to have their decisions doubted
They ask implicated authors to referee despite pleas
Editors do not like to have their decisions doubted
They ask implicated authors to referee despite pleas
Implicated authors feel singled out unfairly, do retaliate
Editors do not like to have their decisions doubted
They ask implicated authors to referee despite pleas
Implicated authors feel singled out unfairly, do retaliate
Replication is not considered to be a contribution
Editors do not like to have their decisions doubted
They ask implicated authors to referee despite pleas
Implicated authors feel singled out unfairly, do retaliate
Replication is not considered to be a contribution
Very few published replications, even fewer retractions
Editors do not like to have their decisions doubted
They ask implicated authors to referee despite pleas
Implicated authors feel singled out unfairly, do retaliate
Replication is not considered to be a contribution
Very few published replications, even fewer retractions
Case studies in paper
What to do?

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On the Need for a Replication Journal
Few even try replication
What to do?

Few even try replication
Data and code sharing not really working
Few even try replication
Data and code sharing not really working
Need incentives for more replication
What to do?

Few even try replication
Data and code sharing not really working
Need incentives for more replication
→ replication journal
Benefit

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On the Need for a Replication Journal
Safe haven for replications
Safe haven for replications
Publication credit
Safe haven for replications
Publication credit
Create culture of replication and replication publication
Safe haven for replications
Publication credit
Create culture of replication and replication publication
Create data and code archive
Safe haven for replications
Publication credit
Create culture of replication and replication publication
Create data and code archive
Have more confidence in policy implications
Not that easy
Overcome negative attitude
Overcome negative attitude
Authoritative editors
Overcome negative attitude
Authoritative editors
Strong procedures
Not that easy

Overcome negative attitude
Authoritative editors
Strong procedures
Avoid undue harassment
1 managing editor, 4 field editors
1 managing editor, 4 field editors

Empirical microeconomic studies
1 managing editor, 4 field editors

1. Empirical microeconomic studies
2. Empirical macroeconomic studies
1 managing editor, 4 field editors

1. Empirical microeconomic studies
2. Empirical macroeconomic studies
3. Simulation studies
1 managing editor, 4 field editors

1. Empirical microeconomic studies
2. Empirical macroeconomic studies
3. Simulation studies
4. Experiments (RCT and lab)
Managing editor: allocates papers to field editors
Managing editor: allocates papers to field editors
Field editor: corresponds with authors and referees, prepares decision file
Managing editor: allocates papers to field editors
Field editor: corresponds with authors and referees, prepares decision file
Other field editors: vote on file
Managing editor: allocates papers to field editors
Field editor: corresponds with authors and referees, prepares decision file
Other field editors: vote on file
Managing editor: records votes, finalizes article
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On the Need for a Replication Journal
1 Importance of replicated study
1. Importance of replicated study
2. Replication failure
1. Importance of replicated study
2. Replication failure
3. Improvement to original study
1. Importance of replicated study
2. Replication failure
3. Improvement to original study
4. Making code and data available
1. Importance of replicated study
2. Replication failure
3. Improvement to original study
4. Making code and data available
5. Lack of previous replication
Criteria

1. Importance of replicated study
2. Replication failure
3. Improvement to original study
4. Making code and data available
5. Lack of previous replication
6. Code and data previously not available
Criteria

1. Importance of replicated study
2. Replication failure
3. Improvement to original study
4. Making code and data available
5. Lack of previous replication
6. Code and data previously not available
7. Difficulty of replication
Will it work?

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On the Need for a Replication Journal
Will it work?

Find editors
Find editors → ?
Will it work?

Find editors → ?
Find host
Will it work?

Find editors → ?
Find host → easy
Find editors → ?
Find host → easy
Find replicators
Will it work?

Find editors → ?
Find host → easy
Find replicators → they are lurking
Find editors → ?
Find host → easy
Find replicators → they are lurking
Find referees
Find editors → ?
Find host → easy
Find replicators → they are lurking
Find referees → they seem willing
Will it work?

Find editors → ?
Find host → easy
Find replicators → they are lurking
Find referees → they seem willing
Find acceptance
Find editors → ?
Find host → easy
Find replicators → they are lurking
Find referees → they seem willing
Find acceptance → ?