

# Replikationen in den Wirtschaftswissenschaften

---

## - Stand und Perspektiven -

***E-Science-Tage 2017***

*Session B1: Innovative Ansätze*

*16. März 2017 an der Universität Heidelberg*

*Ralf Toepfer*

*ZBW Leibniz-Informationszentrum Wirtschaft (Kiel / Hamburg)*



Leibniz-Informationszentrum  
Wirtschaft  
Leibniz Information Centre  
for Economics

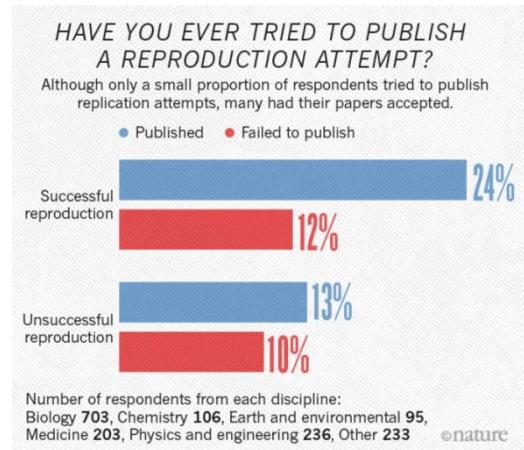
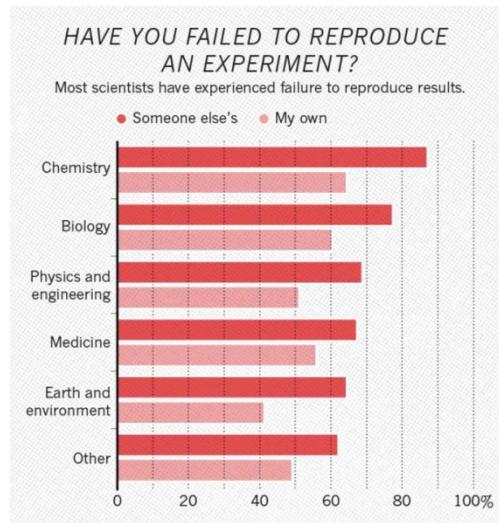
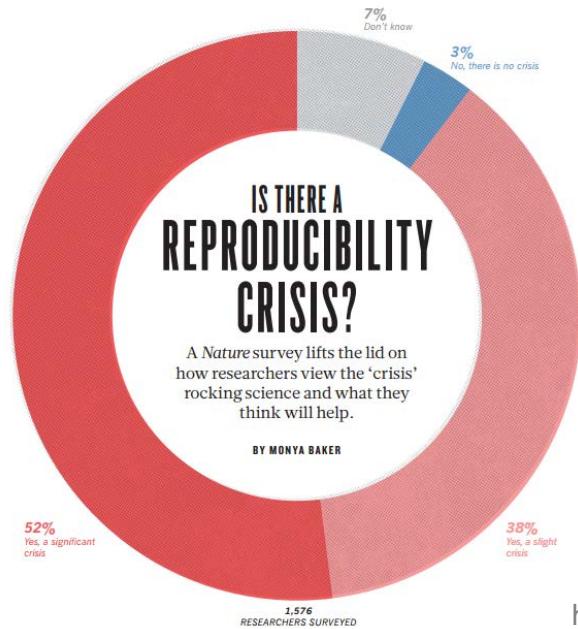
Die ZBW ist Mitglied der Leibniz-Gemeinschaft.

# Agenda

---

1. Einleitung: „Replikationskrise“
2. Zum Stand (und „standing“) von Replikationen in den Wirtschaftswissenschaften
3. Initiativen zur Erhöhung der Reproduzierbarkeit (Perspektiven)
4. Fazit

# 1. Replikationskrise: „Most scientist have experienced failure to reproduce results“



<http://www.nature.com/news/1-500-scientists-lift-the-lid-on-reproducibility-1.19970>

## 2. Zum Stand (und „standing“) von Replikationen in den Wirtschaftswissenschaften

---

„In statistical and other numerical work presented in *Econometrica* the original raw data will, as a rule, be published, unless their volume is excessive.“ (Frisch 1933, p.3)

„Tedious though its requirements may be, reproducibility remains the touchstone of the scientific method. If an empirical finding is a fact, other researchers should be able to observe it, too. Successful and independent repetition of an econometric experiment increases professional confidence in the experiment’s alleged results.“ (Kane 1984, 4)

# „...economics research is usually not replicable“

- Dewald, Thursby & Anderson (1986) attempted to replicate 54 papers published in the Journal of Money, Credit and Banking and could replicate only two (**2/54**)
- McCulloch, McGahey & Harrison (2006) tried to replicate 69 articles published in the same journal and could only replicate 14 (**14/69**)
- McCulloch, McGahey & Harrison (2008) attempted to replicate 117 articles published in the Federal Reserve Bank of St. Louis Review and could only replicate 9 (**9/117**)
- Chang & Li (2015) successfully replicate 29 of 59 papers (49%) from several journals even **with help from the authors**

Finance and Economics Discussion Series  
Divisions of Research & Statistics and Monetary Affairs  
Federal Reserve Board, Washington, D.C.

Is Economics Research Replicable? Sixty Published Papers from Thirteen Journals Say "Usually Not"

Andrew C. Chang and Phillip Li

2015-083

Please cite this paper as:  
Chang, Andrew C., and Phillip Li (2015). "Is Economics Research Replicable? Sixty Published Papers from Thirteen Journals Say "Usually Not".," Finance and Economics Discussion Series 2015-083. Washington: Board of Governors of the Federal Reserve System, <https://dx.doi.org/10.17096/FEDS.2015.083>.

NOTE: Staff working papers in the Finance and Economics Discussion Series (FEDS) are preliminary manuscripts intended to stimulate discussion and encourage comments. The analysis and conclusions set forth are those of the author(s) and do not indicate agreement by other members of the Board or staff of the Board of Governors. References in publications to the Finance and Economics Discussion Series (other than acknowledgement) should be cleared with the author(s) to protect the tentative character of these papers.

Chang, Andrew C., and Phillip Li. Is Economics Research Replicable? Sixty Published Papers from Thirteen Journals Say "Usually Not".  
2015. <https://www.federalreserve.gov/econresdata/feds/2015/files/2015083pap.pdf>

# “Replication includes but is not limited to *slavish duplication* of a predecessors study’s specific procedures.” (Kane 1984, p.5)

Table 3: AN APPLICATION OF PROPOSED TABLE 1 DEFINITIONS TO SELECTED LITERATURE

Comment papers and rejoinders	Original papers and replies	Note
<b>Replication tests</b>		
Leimer and Lennox (1982) Day and Liebowitz (1998) McCrary (2002) Breusch and Gray (2006) Rothstein (2007a, 2007b) Foot and Grotz (2008) Ash and Robinson (2009) Bailey (2009) Bump et al. (2012) Baker (2013)* Hendson et al. (2014) Aiken et al. (2014a)	Feldstein (1974, 1982) Munnell et al. (1983) Levit (1997, 2002) Chapman et al. (2001, 2006) Hoiby (2000) Donohue and Levitt (2001, 2008) Deaton and Lubotsky (2003, 2009) Bailey (2006) Pronyk et al. (2012), Pronyk (2012) Feldstein (1996) Reinhart and Rogoff (2010, 2013) Miguel and Kremer (2004), Hicks et al. (2014a)	<ul style="list-style-type: none"> <li>✓ Fix programming error (also contains mananalysis)</li> <li>✗ Dataset not as presented due to error in gov. dataset</li> <li>✓ Fix programming &amp; classification errors</li> <li>✓ Fix programming &amp; classification errors</li> <li>✗ Alleged “errors in data and computer programs”</li> <li>✓ Paper describes specifications different from code</li> <li>✗ Alleged coding error</li> <li>✓ Rebuild code with somewhat discrepant results</li> <li>✓ Errors in calculating changes in main outcome</li> <li>✓ Gov. dataset may have changed with revisions</li> <li>✓ Coding errors (also contains reanalysis)</li> <li>✗ Coding error; relevance to findings disputed</li> </ul>
<b>Robustness tests</b>		
Boyce and Ravallion (1991) Mack and Wulwick (1991) Harrison (1993) Dai (2002, 2003) Joyce et al. (2006, 2009) Easterly et al. (2004) Houtenville and Burkhauser (2004) Das Gupta (2006), Lin and Lueh (2008) Dority and Fuss (2007) Lott and Whiteley (2007) Özer Ballı and Sørensen (2010, 2013) Ciccone (2011) Albouy (2012) Clemens et al. (2012) Johnson et al. (2013) Davis (2013) Égert (2013) Iversen et al. (2013) Martel García (2013) Iversen and Palmer-Jones (2014) Aiken et al. (2014b) Bowser (2015)	Khan (1984) Phillips (1988) Munnell et al. (1996) Mansfield et al. (2001, 2002) Donohue and Levitt (2001, 2004, 2008) Burnside and Dollar (2000) Acemoglu and Angrist (2001) Oster (2005), Oster et al. (2010) Layard et al. (1994) Donohue and Levitt (2001) Rajan and Subrahmanyam (1998), Easterly et al. (2004), etc. Miguel et al. (2004), Miguel and Satyanath (2011) Acemoglu et al. (2001, 2012) Boone (1996), Burnside and Dollar (2000), etc. Mankiw et al. (1992), Jones and Olken (2005), etc. Sachs and Warner (1997) Reinhart and Rogoff (2010) Banerjee and Iyer (2005) Ross (2006) Jensen and Oster (2009, 2012, 2014) Miguel and Kremer (2004), Hicks et al. (2014b) Deron et al. (2009)	<ul style="list-style-type: none"> <li>◊ New specifications, full data</li> <li>◊ Nonparametric estimator (Siegelman 2011)</li> <li>◊ New specification, additional variables</li> <li>◊ Alternative specification of original model</li> <li>◊ New ident. strategy, serial corr. adjustment</li> <li>◊ Updated data</li> <li>◊ New definitions of disability &amp; employment</li> <li>◊ Large new individual-level dataset</li> <li>◊ New specifications, updated data</li> <li>◊ Alternative dataset</li> <li>◊ De-meaning interaction term</li> <li>◊ New specifications</li> <li>◊ Different dataset by recoding key regressor</li> <li>◊ New specifications and data</li> <li>◊ New, updated dataset</li> <li>◊ Different indep. variable, specification</li> <li>◊ Alternative debt measures, specifications</li> <li>◊ Different dataset by recoding key regressor</li> <li>◊ Recoding regressor of interest</li> <li>◊ Rebuild index (immaterial corrections)</li> <li>◊ Different subsets of data, new specifications</li> <li>◊ Data from new survey round</li> </ul>

Replication tests: ✓ = Little dispute that some substantial replication failure occurred. ✗ = Responding authors dispute substantial replication failure.  
 Robustness tests: ◊ = Reanalysis. • = Extension. ♦ = Reanalysis and extension. Terms defined in Table 1. \*Does not report full results.

„Thus if a replication test gives discrepant results, under current usage of the term, this could mean a wide spectrum of things – from signaling a legitimate disagreement over the best method (science), to signaling incompetence and fraud (pseudoscience).“ (Clemens 2015, p. 1)

Michael A. Clemens: The Meaning of Failed Replications: A Review and Proposal. IZA DP No. 9000. <http://ftp.iza.org/dp9000.pdf>

# „The status quo in empirical research in economics and management is not to share data“

---

(N=488)	Do not share data	Sporadically share data	Share data regulary
<b>Responses</b>	394	82	12
<b>Percent</b>	80.74%	16.8%	2.46%

Andreoli-Versbach, P., Mueller-Langer, F., Open access to data: An ideal professed but not practised. Res. Policy (2014),  
<http://dx.doi.org/j.respol.2014.04.008>

---

# Data + Description (Documentation) + Code

Dataset Activity Stream Related

SHI LI ; Christoph Bühren ; Björn Frank

## Group Decision Making in a Corruption Experiment: China and Germany Compared (replication data)

This paper reports on an experimental investigation of individual versus group decision making in a corruption experiment.

Data Resources

- Converted data (circled)
- Experimental instructions
- Sample recording sheet - group discussion in the companies
- readme file
- replication Stata do-file (circled)

Explore Explore Explore Explore Explore

Journal of Economics and Statistics  
The Journal of Economics and Statistics (Jahrbücher für Nationalökonomie und Statistik) is a scientific journal published in Germany since 1863, since 2016 by DeGruyter. The... read more

Social Google+ Twitter Facebook

China corruption experiment group decisions

<http://journaldata-zbw.eu/>

From the dataset abstract

This paper reports on an experimental investigation of individual versus group decision making in a corruption experiment.

Source: Group Decision Making in a Corruption Experiment: China and Germany Compared (replication data)

Data Explorer

Grid Graph Map 1000 records 1 - 100 Search data Go Filters

round	numm...	Group	payoff...	payoff...	Offici...	transf...	choice	donat...	donat...	rotati...
1	1	1	30	30	0	0	25	25	0	
2	1	1	28	58	0	2	50	50	0	
3	1	1	18	76	0	4	80	80	0	
4	1	1	24	100	0	6	105	105	0	
5	1	1	22	122	0	8	130	130	0	
6	1	1	30	152	0	0	155	155	0	
7	1	1	30	182	0	0	180	180	0	
8	1	1	30	212	0	0	205	205	0	
9	1	1	30	242	0	0	230	230	0	
10	1	1	30	272	0	0	255	255	0	
1	1	1	20	20	1		0	25	25	0
2	1	1	24	44	1		2	50	50	0
3	1	1	18	62	1		4	80	80	0
.	.	.	..	..	..	..	..	..	..	..

Resources

Converted data

Experimental instructions

Sample recording sheet - ...

readme file

replication Stata do-file

Additional Information

Field	Value
Last updated	June 30, 2015
Created	June 30, 2015
Format	CSV
License	No License Provided

Social Google+ Twitter Facebook

„....verifying someone else's empirical research is not a completely respectable use of one's time“

---

“...uninventively verifying someone else's empirical research is not a completely respectable use of one's time. Choosing such a task is widely regarded as *prima facie* evidence of intellectual mediocrity, revealing a lack of creativity and perhaps even bullying spirit.” (Kane 1984, 3)

Kane, Edward J. “Why Journal Editors Should Encourage The Replication Of Applied Econometric Reserach.” Quarterly Journal of Business and Economics, 1984: 3-8.

„..., but replication activities have only marginally increased.“

Figure 1. Histogram of replication studies by year for our sample of 162 articles

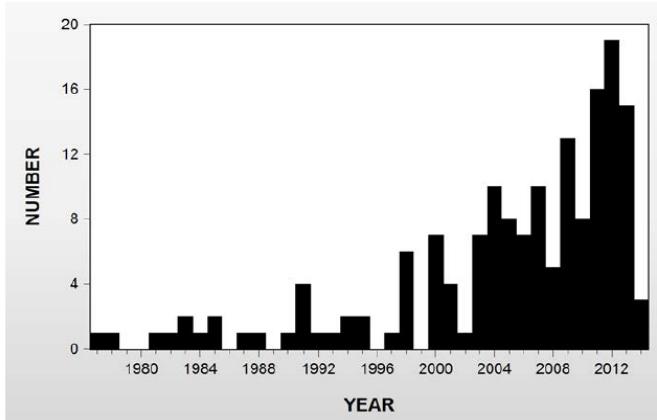


TABLE 3. Distribution of replications across journals

Journal	Frequency Pct. (Number)	Cumulative Pct.
<i>Journal of Applied Econometrics</i>	19.1 (31)	19.1
<i>Journal of Human Resources</i>	11.7 (19)	30.9
<i>American Economic Review</i>	9.3 (15)	40.1
<i>Econ Journal Watch</i>	6.8 (11)	46.9
<i>Journal of Development Studies</i>	6.2 (10)	53.1
<i>Experimental Economics</i>	5.6 (9)	58.6
<i>Applied Economics</i>	4.3 (7)	63.0
<i>Empirical Economics</i>	4.3 (7)	67.3
<i>Journal of Economic and Social Measurement</i>	3.7 (6)	71.0
<i>Public Choice</i>	3.7 (6)	74.7
<i>Journal of Political Economy</i>	1.9 (3)	76.5
<i>Labour Economics</i>	1.9 (3)	78.4
<i>Economic Inquiry</i>	1.2 (2)	79.6
<i>Journal of Environmental Economics and Management</i>	1.2 (2)	80.9
<i>Quarterly Journal of Economics</i>	1.2 (2)	82.1
<i>Review of International Organizations</i>	1.2 (2)	83.3

Maren Duvendack, Richard W. Palmer-Jones and Robert Reed: Replications in Economics: A Progress Report. Econ Journal Watch 12(2), May 2015: 164-191

# Novelty bias

---

„Apparently, we all love ‚bold theory,‘ ‚breaking new ground,‘ and ‚innovative research.‘ However, such an obsessive focus on novelty should not be the sole engine of scientific progress. As in any discipline, real ‚groundbreaking research‘ is very rare, as are successful entries into ‚new terrain.‘ Much scholarly work involves transpiration, and not so much inspiration.“ (van Witteloostuijn 2016, p. 485)

Witteloostuijn, Arjen. „What happened to Popperian falsification? Publishing neutral and negative findings Moving away from biased publication practices.“ Cross Cultural & Strategic Management, 2016: 481-508 <http://dx.doi.org/10.1108/CCSM-03-2016-0084>

# „...an ideal to be professed but not to be practiced“

---

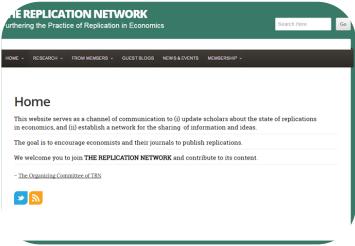
„Economists treat replications the way teenagers treat chastity – as an ideal to be professed but not to be practiced“ (Hamermesh 2007, p. 1)

Hamermesh, Daniel S. Replication in Economics. NBER, 2007. doi: 10.3386/w13026

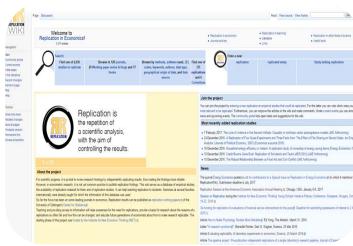
„Somehow though, pleas for replication studies – however well articulated and however often repeated – seem to be falling on deaf ears.“ (Harzing 2016, p. 564)

Harzing, Anne-Wil. “Why replication studies are essential: learning from failure and success”. Cross Cultural & Strategic Management. Vol. 23 Iss 4 pp. 563 – 568. <http://dx.doi.org/10.1108/CCSM-07-2016-0133>

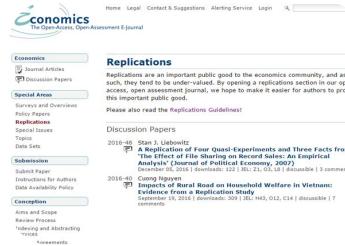
# 3. Initiativen zur Erhöhung der Reproduzierbarkeit



(1) Replication Network



(2) Replication Wiki



(3) Replication Section



(4) Replication Journal

# (1) The Replication Network

The screenshot shows the homepage of THE REPLICATION NETWORK. The header is dark green with white text. It features the title 'THE REPLICATION NETWORK' and the subtitle 'Furthering the Practice of Replication in Economics'. A search bar with the placeholder 'Search Here' and a 'Go' button are on the right. Below the header is a navigation bar with links: HOME, RESEARCH, FROM MEMBERS, GUEST BLOGS, NEWS & EVENTS, and MEMBERSHIP. The main content area has a light gray background and a dark green sidebar on the left. The sidebar contains the word 'Home'. The main content includes a paragraph about the website's purpose, a statement encouraging economists to publish replications, a welcome message for contributors, and a link to the Organizing Committee. At the bottom left are social media icons for Twitter and RSS feed.

THE REPLICATION NETWORK  
Furthering the Practice of Replication in Economics

Search Here Go

HOME RESEARCH FROM MEMBERS GUEST BLOGS NEWS & EVENTS MEMBERSHIP

Home

This website serves as a channel of communication to (i) update scholars about the state of replications in economics, and (ii) establish a network for the sharing of information and ideas.

The goal is to encourage economists and their journals to publish replications.

We welcome you to join THE REPLICATION NETWORK and contribute to its content.

- [The Organizing Committee of TRN](#)

- Update scholars about the state of replications in economics
- Establish a network for the sharing of information and ideas

<https://replicationnetwork.com/>

# (2) Replication Wiki

Welcome to  
Replication in Economics!  
1,071 entries

Read View source View history Go Search

Replication in economics  
Replication in teaching  
Replication in other fields of science

Replication policies  
Literature  
Links  
Useful tools

Find one of 2,036 studies to replicate

Browse 129 journals, 29 Working paper series & blogs and 17 books

Browse by methods, software used, JEL codes, keywords, authors, date type, geographical origin of data, and data source

Find one of 331 replications and 6 Corrections

Enter a new: replication replicated study Study lacking replication

Join the project

You can join the project by entering a new replication or empirical studies that could be replicated. For the latter you can vote which ones you find most relevant to be replicated. Furthermore, you can improve the articles in the wiki and make comments. Under current events you can announce news and upcoming events. The community portal lists open tasks and suggestions for the wiki.

Most recently added replication studies

- 7 February 2017: The cycle of violence in the Second Intifada: Causality in nonlinear vector autoregressive models (JAE forthcoming)
- 24 December 2016: A Replication of Four Quasi-Experiments and Three Facts from 'The Effect of File Sharing on Record Sales: An Empirical Analysis' (Journal of Political Economy, 2007) (Economics e-journal 2016)
- 16 December 2016: Household energy efficiency in Ireland: A replication study of ownership of energy saving items (Energy: Economics 1997)
- 15 December 2016: Credit Booms Gone Bust: Replication of Schularick and Taylor (AER 2012) (JAE forthcoming)
- 15 December 2016: The Robust Relationship Between US Food Aid and Civil Conflict (JAE forthcoming)

About the project

For scientific progress, it is pivotal to review research findings by independently replicating results, thus making the findings more reliable. However, in economic research, it is not yet common practice to publish replication findings. This wiki serves as a database of empirical studies, the availability of replication material for them and of replication studies. It can help teaching replication to students. Seminars at several faculties elsewhere have already taught for which the information of this database was used. So far the focus has been on empirical research in economics. Replication results can be published as replication working papers (i) of the University of Göttingen's Center for Social and Cultural Research (ZfS).

Teaching and providing access to information will raise awareness for the need for replications, provide a basis for research about the reasons why replications so often fail and how this can be changed, and educate future generations of economists about how to make research replicable. The starting phase of this project was funded by the Institute for New Economic Thinking (INET).

News

The journal Energy Economics posted a call for contributions to a Special Issue on Replication in Energy Economics (in which it mentions the ReplicationWiki). Submission deadline is July 2017.

Replication Session at the American Economic Association Annual Meeting, Chicago, USA, January 6-8, 2017

Session on Replication during the Institute for New Economic Thinking Young Scholar Initiative Plenary Conference, Budapest, Hungary, October 19-22, 2016

See funding for replication of evaluations of financial service interventions for the poor: Deadline for submitting expressions of interest is 2 August 2016.

Article How to Make Psychology Studies More Reliable, Ed Yong, The Atlantic, March 31, 2016

Letter "A research symbol?", Berndt Fischer, Gerl G. Wagner, Science, 25 Mar 2016

Article Evaluating replicability of laboratory experiments in economics, Science, 26 March 2016

Article The pipeline project: Pre-publication independent replications of a single laboratory's research pipeline, Journal of Experimental Social Psychology, available online since 24 March 2016, in press

„This wiki serves as a database of empirical studies, the availability of replication material for them and of replication studies.“

[http://replication.uni-goettingen.de/wiki/index.php/Main\\_Page](http://replication.uni-goettingen.de/wiki/index.php/Main_Page)

# (3) Replication Section

The screenshot shows the homepage of the Economics-eJournal. At the top, there is a navigation bar with links for ARTICLES, DISCUSSION PAPERS, SPECIAL AREAS, ABOUT, and a search icon. Below the navigation bar, the word "Economics" is prominently displayed. Under the heading "Replications", it says: "Replications are an important public good to the economics community, and as such, they tend to be under-valued. By opening a replications section in our open access, open assessment journal, we hope to make it easier for authors to provide this important public good." It also mentions: "Please also read the Replications Guidelines!"

Under the heading "Discussion Papers", there are two entries:

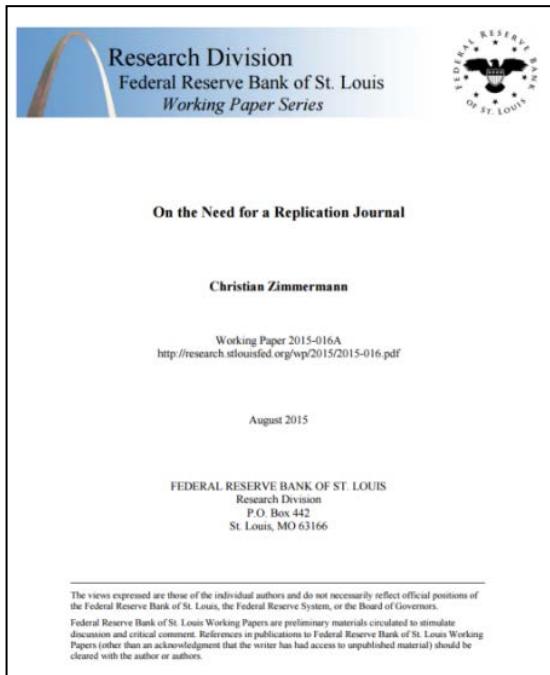
- Stan J. Liebowitz**  
A Replication of Four Quasi-Experiments and Three Facts from 'The Effect of File Sharing on Record Sales: An Empirical Analysis' (Journal of Political Economy, 2007)  
December 05, 2016 | Downloads: 152 | JEL: Z1, O3, LB | 4 comments | discussible
- Cuong Nguyen**  
Impacts of Rural Road on Household Welfare in Vietnam: Evidence from a Replication Study  
September 19, 2016 | Downloads: 344 | JEL: H43, O12, C14 | 7 comments | discussible

At the bottom of the page, there is a footer with links for HOME, LEGAL, CONTACT & SUGGESTIONS, ALERTING SERVICE, and social media icons for Twitter, Facebook, Google+, and LinkedIn. Logos for KIEL INSTITUTE FOR THE WORLD ECONOMY and ZBW Leibniz Informationsezentrum Wirtschaft are also present.

“Replications are an important public good to the economics community, and as such, they tend to be under-valued. By opening a replications section in our open access, open assessment journal, we hope to make it easier for authors to provide this important public good.”

<http://www.economics-ejournal.org/special-areas/replications>

# (4) Replication Journal (I)



„Existing journals could be more willing to accept replication studies, but it is clear reputational inertia is not providing the right incentives. Hence, I suggest the creation of a journal entirely dedicated to replication.“ (Zimmermann 2014, p. 3)

Zimmermann, Christian. On the Need for a Replication Journal. St. Louis, 2014.  
<https://research.stlouisfed.org/wp/2015/2015-016.pdf>

# (4) Replication Journal (II)

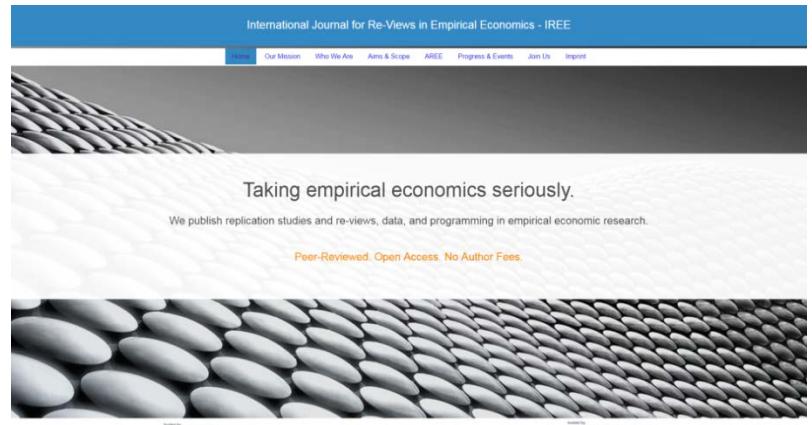
---

## INTERNATIONAL JOURNAL FOR RE-VIEWS IN EMPIRICAL ECONOMICS - IREE

Ziel des Projektes ist die Einführung einer neuartigen Zeitschrift für die Publikation von systematischen Überblicks- und Replikationsstudien und Forschungsdaten in den empirischen Wirtschaftswissenschaften.

IREE ist als Open-Access-Journal ohne Autorengebühren angelegt, um eine möglichst große Zahl an Einreichungen und Sichtbarkeit zu erreichen. Es sollen insbesondere Beiträge publiziert werden, die sich mit der Robustheit empirischer Befunde in den Wirtschaftswissenschaften beschäftigen und dabei selbst auf die Analyse von Daten zurückgreifen. Die verwendeten Datensätze werden dabei zusammen mit der Publikation im Datenarchiv von IREE gespeichert, dokumentiert und (soweit möglich) anderen Wissenschaftlern zugänglich gemacht. Zudem werden Beschreibungen von Datensätzen publiziert. Jeder Publikationstyp und –teil wird mit der Vergabe einer DOI zitierfähig.

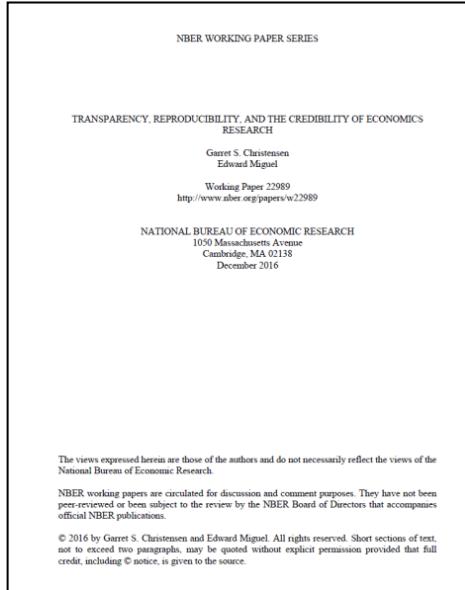
Durch die Möglichkeit Replikations- und Überblicksstudien systematisch und unabhängig von ihrem Ergebnis zu veröffentlichen, werden **empirische Befunde** in den Wirtschaftswissenschaften sowohl an Robustheit als auch Genauigkeit gewinnen und können so als **solide Basis für die Wirtschaftspolitik** dienen.



<http://www.zbw.eu/de/ueber-uns/arbeitsschwerpunkte/forschungsdatenmanagement/iree/>

---

## 4. Fazit: „...‘this time’ really may be different...“



*„The rising interest in transparency and reproducibility in economics reflects broader global trends regarding these issues, both among academics and beyond. As such, we argue that ‘this time’ really may be different than earlier bursts of interest in research transparency within economics (...) that later lost momentum and mostly died down.“ (Christensen & Miguel 2016, p. 61)*

Christensen, Garret S., und Edward Miguel. Transparency, Reproducibility, And The Credibility of Economics Research. NBER Working Paper 22989: <http://www.nber.org/papers/w22989>, 2016.

# „Vielen Dank für Ihre Aufmerksamkeit!“

Kontakt:

**Ralf Toepfer**

ZBW – Leibniz-Informationszentrum  
Wirtschaft  
Neuer Jungfernstieg 21, 20354 Hamburg

E: [r.toepfer@zbw.eu](mailto:r.toepfer@zbw.eu)

T: +49(0)40.42834-449

Twitter: @thiaru



Leibniz-Informationszentrum  
Wirtschaft  
Leibniz Information Centre  
for Economics



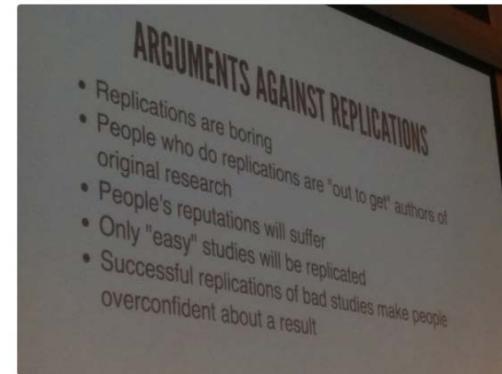
ResearchTransparency  
@UCBITSS

Folge Ich

Don't worry, we're mostly debunking these.

#MSST2016

Übersetzung anzeigen



RETWEETS  
7

GEFÄLLT  
8



18:35 - 22. Apr. 2016



# Literatur

---

- Andreoli-Versbach, Partrick, und Frank Mueller-Langer. „Open Access to data: An ideal professed but not practised.“ *Research Policy*, November 2014: 1621-1633.  
<http://dx.doi.org/10.1016/j.respol.2014.04.008>
- Baker, Monya. „Is there a Reproducibility Crisis?“ *Nature*, 26. May 2016: 452-454. doi:10.1038/533452a
- Chang, Andrew C., and Phillip Li. *Is Economics Research Replicable? Sixty Published Papers from Thirteen Journals Say "Usually Not"*. 2015.  
<https://www.federalreserve.gov/econresdata/feds/2015/files/2015083pap.pdf>
- Christensen, Garret S., und Edward Miguel. *Transparency, Reproducibility, And The Credibility of Economics Research*. NBER Working Paper 22989: <http://www.nber.org/papers/w22989> , 2016.
- Clemens, Michael A. *The Meaning of Failed Replications: A Review and Proposal*. IZA, 2016. <http://ftp.iza.org/dp9000.pdf>
- Dewald, William G., Jerry Thursby, and Anderson Richard G. “Replication in Empirical Economics: The Journal of Money, Credit and Banking Project.” *American Economic Review*, 1986: 587-603. <http://www.jstor.org/stable/1806061>
- Duvendack, Maren, Richard W. Palmer-Jones, and Robert W. Reed. “Replications in Economics: A Progress Report.” *Econ Journal Watch*, 2015: 164-191.  
<https://econjwatch.org/articles/replications-in-economics-a-progress-report>
- Frisch, Ragnar. “Editorial.” *Econometrica*, 1933: 1-4.
- Hamermesh, Daniel S. *Replication in Economics*. NBER, 2007. doi: 10.3386/w13026
- Harzing, Anne-Wil. “Why replication studies are essential: learning from failure and success”. *Cross Cultural & Strategic Manamement*. Vol. 23 Iss 4 pp. 563 – 568.  
<http://dx.doi.org/10.1108/CCSM-07-2016-0133>
- Kane, Edward J. “Why Journal Editors Should Encourage The Replication Of Applied Econometric Reserach.” *Quarterly Journal of Business and Economics*, 1984: 3-8.
- McCullough, B.D. „Open Access Economics Journals and the Market for Reproducible Economic Research.“ *Economic Analysis & Policy*,. March 2009 (Vol. 39, No.1): 117-126. doi:  
[http://dx.doi.org/10.1016/S0313-5926\(09\)50047-1](http://dx.doi.org/10.1016/S0313-5926(09)50047-1)
- McCullough, B.D., K.A. McGeary, und T. Harrison. „Lessons from the JMBC Archive.“ *Journal of Money, Credit and Banking*, 2006: 1093-1107. doi: <http://dx.doi.org/10.1353/mcb.2006.0061>
- McCullough, B.D., K.A. McGeary, und T.D. Harrison. „Do Economic Journal Archives Promote Replicable Research?“ *Canadian Journal of Economics*, 2008: 1406-1420.
- Zimmermann, Christian. *On the Need for a Replication Journal*. St. Louis, 2014. <https://research.stlouisfed.org/wp/2015/2015-016.pdf>
- Witteloostuijn, Arjen. „What happend to Popperian falsification? Publishing neutral and negative findings Moving away from biased publication practices.“ *Cross Cultural & Strategic Management*, 2016: 481-508 <http://dx.doi.org/10.1108/CCSM-03-2016-0084>