

Supplementary Information
for the *Nature* Comment ‘How to make replication the norm’
by Paul Gertler, Sebastian Galiani and Mauricio Romero

(*Nature* 554, 417–419 (2018); <https://www.nature.com/articles/d41586-018-02108-9>)

Table S1: Journal Policies on Posting Data and Code

(See Table S5 for the specific journals assessed)

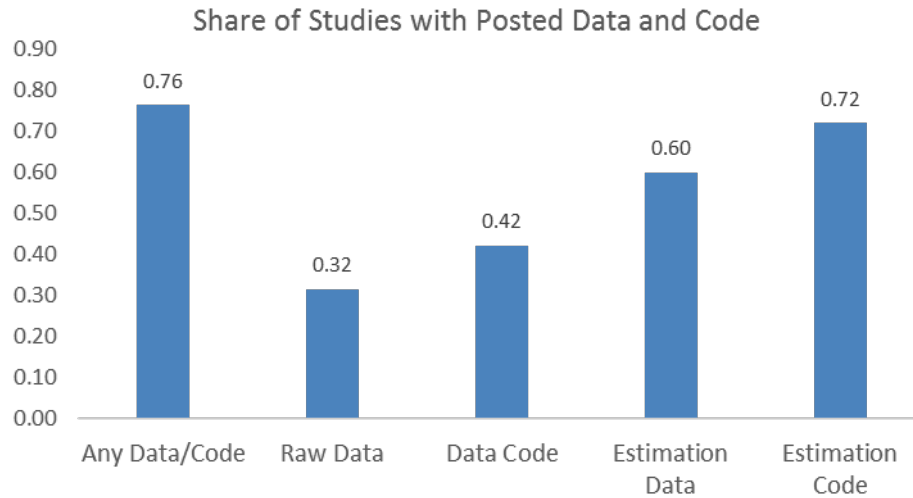
	Economics (Top tier)	Economics (Mid tier)	Political Science	Sociology	Psychology	General Science
Journals analyzed	11	23	10	10	10	3
Code/Data required before publication	10	8	8	2	1	3
Code/Data optional/encouraged	1	9	0	2	2	0
Raw data must be submitted	10	7	0	0	0	0
Code/Data verified before publication	0	0	3	0	0	0

We surveyed the last three issues as of May 2016 of nine leading economics journals. Table S5 lists the journals used in this exercise. In total, 415 articles were published in these journals, of which, 266 (64%) are “non-structural” empirical papers and 63 of those used restricted or proprietary data. The remaining 203 articles were included in our main sample.

Among those 203 articles, we first checked to see whether the following files were posted and downloadable: i) the raw data used in the study, ii) the final estimation data set after data cleaning and variable manipulation were performed, iii) the data manipulation code used to convert the raw data to the estimation data, and iv) the estimation code used to produce the final tables and figures. Overall, we found that only 76% of studies published at least one of the four files.

The raw data and data manipulation code were posted in about one-third of the cases, while the final estimation data and code were posted in about two-thirds of the cases.

Figure S1



We then tried to replicate the tables and figures for the papers that posted data and code. Conditional on having the data and code available, only 54% of articles had “data manipulation code” that did not require major modifications (e.g., changing folder directories and installing additional packages) and only 61% of articles had “estimation code” that did not require major modifications. In short, only 14% of the articles in our sample of 203 were fully replicable (i.e. from raw data, to final tables and figures) and only 37% were partially replicable (i.e. from the estimation data to final tables and figures).

Figure S2

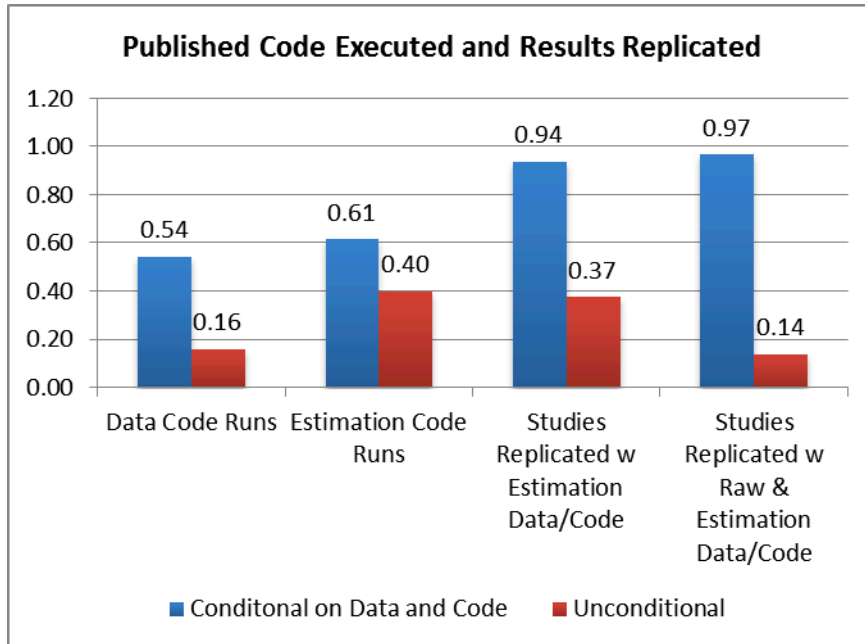


Table S2: Journals Searched for Published Replication Studies

1. American Economic Review
2. AEJ: Economic Policy
3. AEJ: Applied Economics
4. Quarterly Journal of Economics
5. Econometrica
6. The Review of Economic Studies
7. Review of Economics and Statistics
8. Journal of Labor Economics
9. Journal of Public Economics
10. Journal of Political Economy
11. Journal of Development Economics

Table S3: Replication studies published

Original				Replication			
Title	Authors	Journal	Year	Title	Authors	Journal	Year
1. Heterogeneity and aggregation: Implications for labor-market fluctuations	Chang, Yongsung, and Kim, Sun-Bin	AER	2007	Heterogeneity and Aggregation: Implications for Labor-Market Fluctuations: Comment	Shuhei Takahashi	AER	2014
2. Stock Prices, News, and Economic Fluctuations	Paul Beaudry and Franck Portier	AER	2006	Stock Prices, News, and Economic Fluctuations: Comment	André Kurmann and Elmar Mertens	AER	2014
3. Intergenerational occupational mobility in Great Britain and the United States since 1850	Jason Long and Joseph Ferrie	AER	2013	Intergenerational occupational mobility in Great Britain and the United States since 1850: Comment	Yu Xie and Alexandra Killewald	AER	2013
4. Intergenerational occupational mobility in Great Britain and the United States since 1850	Jason Long and Joseph Ferrie	AER	2013	Intergenerational occupational mobility in Great Britain and the United States since 1850: Comment	Michael Hout and Avery M. Guest	AER	2013
5. The colonial origins of comparative development: An empirical investigation	Daron Acemoglu, Simon Johnson and James A. Robinson	AER	2001	The colonial origins of comparative development: an empirical investigation: comment	David Y. Albouy	AER	2012
6. Taxes, cigarette consumption, and smoking intensity	Jérôme Adda and Francesca Cornaglia	AER	2006	Taxes, cigarette consumption, and smoking intensity: comment	Jason Abrevaya and Laura Puzzello	AER	2012
7. Growth dynamics: the myth of economic recovery	Valerie Cerra and Sweta Chaman Saxena	AER	2008	Growth dynamics: the myth of economic recovery: comment	Hannes Mueller	AER	2012
8. The economic impacts of climate change: evidence from agricultural output and random fluctuations in weather	Olivier Deschênes and Michael Greenstone	AER	2007	The economic impacts of climate change: evidence from agricultural output and random fluctuations in weather: comment	Anthony C. Fisher, W. Michael Hanemann, Michael J. Roberts and Wolfram Schlenker	AER	2012
9. Economic shocks and civil conflict: An instrumental variables approach	Edward Miguel, Shanker Satyanath and Ernest Sergenti	JPE	2004	Economic shocks and civil conflict: A comment	Antonio Ciccone	AEJ: Applied	2011
10. Natural resource abundance and economic growth	Sachs and Warner	Working Paper, CGD	1997	Replicating Sachs and Warner's working papers on the resource curse	Davis	JDE	2013
11. Institutions, and economic performance: the legacy of colonial land tenure systems in India	Banerjee and Iyer	AER	2005	On the colonial origins of agricultural development in India: a re-examination of Banerjee and Iyer, "History, institutions and economic performance"	Iversen, Palmer-Jones, and Sen	JDE	2013

Table S4: Journals from Which Editors and Co-Editors Surveyed

Journal	Discipline
1. American Economic Review	Economics
2. AEJ: Economic Policy	Economics
3. AEJ: Applied Economics	Economics
4. Quarterly Journal of Economics	Economics
5. Econometrica	Economics
6. The Review of Economic Studies	Economics
7. Review of Economics and Statistics	Economics
8. Journal of Labor Economics	Economics
9. Journal of Public Economics	Economics
10. Journal of Political Economy	Economics
11. Journal of Development Economics	Economics

Table S5: Journals Reviewed for Policies on Posting Code and Data

Journal	Discipline	Journal	Discipline
1. American Economic Review	Economics	2. American Sociological Review	Sociology
3. AEJ: Economic Policy	Economics	4. American Journal of Sociology	Sociology
5. AEJ: Applied Economics	Economics	6. Social Forces	Sociology
7. Quarterly Journal of Economics	Economics	8. Annual Review of Sociology	Sociology
9. Econometrica	Economics	10. Sociological Methods & Research	Sociology
11. The Review of Economic Studies	Economics	12. Theory & Society	Sociology
13. Review of Economics and Statistics	Economics	14. Social Networks	Sociology
15. Journal of Labor Economics	Economics	16. Sociological Theory	Sociology
17. Journal of Public Economics	Economics	18. Gender & Society	Sociology
19. Journal of Political Economy	Economics	20. Work & Occupations	Sociology
21. Journal of Development Economics	Economics	22. American J of Political Science	Political Science
23. Journal of Economic Perspectives	Economics	24. American Political Science Review	Political Science
25. Journal of Economic Literature	Economics	26. Journal of Politics	Political Science
27. AEJ: Macroeconomics	Economics	28. Quarterly J of Political Science	Political Science
29. AEJ: Microeconomics	Economics	30. Political Analysis	Political Science
31. Economic Journal	Economics	32. Comparative political Studies	Political Science
33. Journal of Economics Growth	Economics	34. World Politics	Political Science
35. International Economic Review	Economics	36. British Journal of Political Science	Political Science
37. The Rand Journal of Economics	Economics	38. International Organization	Political Science
39. Journal of Health Economics	Economics	40. International Security	Political Science
41. European Economic Review	Economics	42. Psychological Science	Psychology
43. Journal of Human Resources	Economics	44. J of Personality and Social Psych	Psychology
45. Journal of Industrial Economics	Economics	46. Journal of Experimental Psych	Psychology
47. Journal of Applied Econometrics	Economics	48. Journal of Applied Psychology	Psychology
49. Journal of Monetary Economics	Economics	50. Cognitive Psychology	Psychology
51. Journal of International Economics	Economics	52. Org Behavior & Human Decision	Psychology
53. Journal of Law and Economics	Economics	54. Social Psych and Personality Sci	Psychology
55. Journal of Business & Economic Stat	Economics	56. J of Experimental Social Psych	Psychology
57. Journal of Finance	Economics	58. Journal of Personality	Psychology
59. Journal of Law, Economics & Org	Economics	60. Personality & Social Psych Bull	Psychology
61. International Journal of Industrial Org	Economics	62. PNAS	General Science
63. Journal of Economic Behavior & Org	Economics	64. Nature	General Science
65. The Scandinavian Journal of Economics	Economics	66. Science	General Science
67. Oxford Economic Papers	Economics		

Table S6: Journals Included in Verification Studies

1. American Economic Review
2. AEJ: Economic Policy
3. AEJ: Applied Economics
4. Econometrica
5. The Review of Economic Studies
6. Review of Economics and Statistics
7. Journal of Labor Economics
8. Journal of Political Economy
9. Journal of Development Economics

Letter sent to editors

Dear [INSERT NAME]:

We are writing to you as an editor of the [INSERT JOURNAL] to request your help in understanding Journal policies about replication studies. We define replication studies as those that use data from previously published articles (and possibly secondary datasets from the same location) to check the validity and robustness of the originally published results.

We ask you to take a few minutes to complete an online survey of six (6) yes/no questions. Your participation is voluntary and your responses will be completely anonymous. You can skip questions that you do not wish to answer and you have the right to discontinue participation at any time. All responses will be confidential and only reported in aggregate form.

We are surveying the editors of top journals that publish empirical work in Economics, Political Science, Psychology and Sociology. The results of this survey will be included in a report on the state of replication in social sciences, sponsored by the [Berkeley Initiative for Transparency in the Social Sciences](#) (BITSS). While there is no direct benefit to you for participating in the study, there is potential benefit to better understand and improve the role of replication in ensuring that published research is more robust and credible.

Below is the link to the survey. By submitting your responses you will also be providing consent to be surveyed.
<https://goo.gl/forms/EIkm0DMNovGVIWiZ2>

Thank you in advance for your participation in the survey. We know your time is valuable and greatly appreciate your help. If you have any questions, please contact us at the email addresses below.

Kind regards and many thanks,

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Replication Survey

By "replication study" we refer to a study that uses data from a previous study (and possibly secondary datasets from the same location) to check the validity and robustness of the results.

* Required

1. **Journal Name (Journal you are an editor of): ***

2. **1) How long (in years) have you been editor for this journal? ***

3. **2) Would you consider publishing a "replication study" of a paper previously published in your journal if it claims to overturn the results from the original paper? ***

Mark only one oval.

- Yes
 No
 NA

4. **3) Would you consider publishing a "replication study" of a paper previously published in your journal if it confirms the results from the original paper? ***

Mark only one oval.

- Yes
 No
 NA

5. 4) Has any "replication study" been submitted to your journal during your tenure as editor? *

Mark only one oval.

- Yes
 No
 NA

6. 5) Have you ever sent out for review a "replication study" that claimed to overturned the results of an original study? *

Mark only one oval.

- Yes
 No
 NA

7. 6) Have you ever sent out for review a "replication study" that only confirmed the results of an original study? *

Mark only one oval.

- Yes
 No
 NA