

Transparency in empirical economic research

Open science can enhance research credibility, but only with the correct incentives

Keywords: research transparency, open science, data sharing, p-hacking and replication

ELEVATOR PITCH

The open science and research transparency movement aims to make the research process more visible and to strengthen the credibility of results. Examples of open research practices include open data, pre-registration, and replication. Open science proponents argue that making data and codes publicly available enables researchers to evaluate the truth of a claim and improve its credibility. Opponents often counter that replications are costly and that open science efforts are not always rewarded with publication of results.

KEY FINDINGS

Pros

- + Open science and research transparency offer the potential to improve empirical economic research's credibility.
- + Sharing data and codes may allow other researchers to detect false-positive findings and increase the visibility and prominence of academic publications.
- + A growing number of free data repositories allow researchers to share information more effectively, thus eliminating the monetary cost of storing data and code.
- + A growing number of simple, low-cost, editorial policies may easily decrease the extent of publication bias.

Cons

- Sharing data in a usable format requires considerable time and effort by knowledgeable people.
- There is a lack of funding for, and to some extent interest in, replication studies.
- Transparent practices such as pre-analysis plans may stifle researchers' creativity and possibly prevent important breakthroughs arising from exploratory analysis.
- There may be substantial upfront costs to transparency and openness and open science efforts are often not rewarded with publication of results.

AUTHOR'S MAIN MESSAGE

Open science and research transparency can lead to improved credibility within empirical economic research, which represents a key input in economic policy design. Nonetheless, there remain concerns surrounding the costs associated with open science and the lack of incentives for transparent research. Despite these concerns, the potential benefits justify the efforts. Researchers and policymakers should thus pay close attention to recent developments in open research that may alleviate some of the main drawbacks, such as encouraging registered reports and editorial policies to promote transparent practices.

