# Database of economic refutation - a proposal

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# DATABASE OF ECONOMIC REFUTATIONS – A PROPOSAL

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## ABSTRACT

Much of economic literature is based on theory or evidence that has been refuted, and economists may spend years of their lives using long-discredited economics. It is, however, virtually impossible to find these refutations. It is proposed to set up a database of refutations, so that economists can check that the economics they use and the papers they cite, have not been refuted. This will also discourage economists from publishing papers that they know to be bad or carelessly written.

## THE PROBLEM

Inevitably, even the best economists and the most honest economists will read and be influenced by bad economics and fraudulent economics – nobody could claim to have the competence or the time to identify all bad economics in a quick read through. People spend years writing PhDs without realising that the research programme had been refuted before they started. Indeed, some researchers spend their careers working on research programmes that had been refuted before they started. The cost cannot be measured in just billions or hundreds of billions. Perhaps not in hundreds of trillions.

There are excellent economic refutations in the literature – destroying individual papers, research programmes and paradigms, destroying real world economic models and pure theory, exposing falsehoods and the misuse of statistical and other tools. Refutations could be used for an economic revolution, clearing out the vast amount of rubbish that is drowning our subject, and identifying what is needed for a new economics.

In fact, most refutations have little impact, because nobody knows that they exist or how to find them. How do you find out even which Nobel Prize winners have been accused of fraud and where to find the evidence? And how do you find out how much of the economics that you want to use in your next paper has been shown to be based

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on wrong information and bad theory?

The refutations are invisible because many economists only cite papers that support their pet theory – cherry-picking, 'wilful blindness' or out-and-out fraud. Some feel that they have to cite critics, so they do cite them, but they misrepresent their objective and conclusions. Some influential economists help kill off other people's research programmes by sneering at them in their papers and, when they are reviewers, rejecting their papers, books and applications for funding. Some refutations are brilliantly successful and kill off a research programme so thoroughly that everybody has forgotten where to find it or even that it existed when the research programme is reinvented by a new influx of economists ten years later. Some refutations are drowned out by the flood of papers in our subject, good, bad, or terrible.

There is a vast literature in economics and elsewhere showing that people are wilfully blind, choosing to ignore evidence that does not fit their prejudices or beliefs, evidence that makes them feel insecure, and evaluating evidence in biased and illogical ways. (Heffernan, 2011; Tversky & Kahneman, 1974; Kahneman, Slovic, & Tversky, 1982; Kahneman, 2012; Benson, 2022). Many deliberately suppress refutations that challenge their beliefs, their work or their professional reputation.

There are whole research programmes in economics that are based on, or at least strongly influenced by, very bad or fraudulent research, and this fraudulent research may be cited thousands or hundreds of thousands of times. Retraction Watch (https://retractionwatch.com) continually produces evidence that papers which are publicly retracted by journals for fraud or misconduct continue to be cited.

## THE SCALE OF THE PROBLEM

Many of the books and papers on economics are wrong. Any researcher may make mistakes, and those facing 'publish or perish' are likely to put speed before rigour. Researchers are keen to get 'publishable results', to get results that agree with their beliefs, to get results that will not upset existing or potential employers, so they adjust their papers accordingly. They may skip standard protocols, in statistics and econometrics for instance, as being too time consuming. Usually, they do not realize that this makes their research invalid and that they are acting fraudulently. Deliberate fraud is threatening research in all disciplines: it is believed that 20% of published papers in health and medicine are fraudulent which suggests that researchers should start with the presumption that all papers are faked (Smith, 2021). This implies that much or most of research funding has to be spent on testing, refuting and 'drowning out' bad research, so less and less time is available for new research. Medical researchers fake in the sure and certain knowledge that faked research will cause death or suffering. It would be difficult to argue that economic researchers are more scrupulous. Indeed, I know two economic research programmes that are largely

fraudulent even though this appears to have caused death and destitution.

The result is that a high proportion of published books and papers is bad, wrong. This creates noise. We have to plough through a lot of bad economics to find the reasonable stuff, let alone the good stuff. This is a cost.

## THE ANSWER

There is a need for a searchable database of refutations, so that we can find them. Economists want to know the pitfalls before we start a project. We do not want to produce bad research. We do not want to work for months or years with theory that is wrong; we do not want to misuse statistical methods; we do not want to use meaningless or false data; we do not want to use or cite research that is false or even faked. If we could start each project by spending a day or two checking the refutations, our work would be much better and vastly more reliable.

It would be good if we could enter JEL categories or a keywords and get a printout of titles and abstracts of refutations. Most, perhaps, would be irrelevant to our particular study, but some would be relevant and often one or two would be of key importance, enabling us to avoid disaster. As with any search engine, the database will turn up a lot of papers that are not directly relevant, but just one relevant refutation means that the economist can avoid a major blunder.

Often the critics have written other refutations on the same or related research programmes, and some of these may also apply to the project we are working on.

The database should also enable us to search by the authors criticized. It is reasonable to start with the hypothesis that anything written by authors who have been refuted even once is wrong. It may be that most of the people who cite the offending authors share their errors.

Editors, potential employers and potential funders may use the database to identify suspect researchers, and this will affect their careers. One may hope that the existence of a Database of Economic Refutations will provide some disincentive to those publishing bad research.

## WHAT WILL BE INCLUDED?

What will be included in the Database? The editors do not make any judgement on the validity of the refutation. The key publications are ones which formally show that an economic model or theory are wrong. Typically, a real-world economic model may be shown to have incorrect facts or incorrect logic (theory). Misuse of statistics of econometrics qualifies for inclusion. Refuting by failure of predictions would be included, though this refutation is seldom possible in economics. Pure theory may be refuted by showing that its assumptions are false, perhaps contradictory, or that its

logic is incorrect. Refutations may attack parts of a paper, a research programme or a paradigm, but commonly attack the whole of a paper.

The database should not include normal economics, the constant improvement by modifying and improving existing models or approaches and presenting alternatives. Alternatives are not refutations. It would cover refutations using formal approaches which can themselves be challenged. It should not include the brief blog comments that are made on Pub Peer for example, though many of these could easily be developed into powerful half-page or one-page refutations or, indeed rewritten as an abstract. A book may have a chapter that could stand alone as a refutation, and this would qualify as a refutation. Less obviously, a long and complex paper may contain a section which is a formal refutation of some theory or data – an aside showing the statistical error in some data sources may be of wider application than the main message of the paper. Preprints are acceptable, as the only way of publishing refutations when journals and publishers have a policy of not publishing critical comments. Novelty is not a criterion: the same elementary mistakes are made in paper after paper, and we may hope that if they are publicly exposed often enough, researchers will try and avoid them. It would be a major benefit if everyone doing surveys, for example, read the textbooks and followed the protocols.

The policy would be to exclude publications containing personal abuse, sneers and snide remarks. Ideally, editors might weed out those replies and rejoinders that dishonestly do not tackle the argument of the original comment or refutation, or who misrepresent it. Perhaps it would be sufficient to add a note to the abstract. Clearly the editors will have to make subjective decisions on what not to include.

How will the refutations be collected? Initially authors will be asked to enter their own papers, as in ResearchGate or Academia. They will also be asked to submit refutations that they come across in the literature. A search of the literature for papers with the words ‘Comment’, ‘Reply’, ‘Rejoinder’, ‘Critical’ or ‘Refutation’ may be expected to identify refutations. Authors will submit copies of their refutations to prove that they exist.

## PUBLICATION

There are three modes of publication,

1. Most of the publication is done by providing a searchable database on a web page.
2. Researchers will be able to subscribe to an emailed monthly list of new refutations. This means that they can routinely scan for retractions in their own specialty and in other areas of economics they use.
3. A new service is offered by some referencing programmes. Retraction Watch’s database is now linked to EndNote, LibKey, Papers, and Zotero,

and Third Iron (LibKey and BrowZine) services, so researchers who use these to manage their research library are alerted immediately they cite a retracted paper. It is hoped that Database of Economic Refutations could have similar links.

## SEARCHING

The information set out below will provide the maximum search opportunities. It is not expected that all the information listed will be available or will be relevant. For example, the authors criticized in a refutation of a research programme may not be the leaders of the programme, but the authors who made most mistakes, and the refutation may not identify individuals. We are aware of the many on-line forms and questionnaires which refuse to continue if you do not know something or if you do not answer an irrelevant or meaningless question: the form used for this database will not reject information or refuse to continue if there are gaps.

The information that would be collected would be:

Name of author
Title of publication
Publication details
Abstract
Date
Link
JEL Category
Keywords

Names of authors criticized

Publications criticized
(Allow for up to 100)
- Name of author
- Title of publication
- Publication details
- Date

Responses, replies and rejoinders
{Allow for up to twenty}
- Name of author
- Title of publication
- Publication details
- Date

## RETRACTIONS

I have never seen an economic paper retracted by an economic journal, though retraction is becoming more important in other academic publishing. Retraction Watch reports retractions particularly in the experimental sciences and has a database of them. The possible impact of retractions is limited by the fact that universities, journals and academic publishers want to protect their brand and that they fail to retract some of the most glaring examples of incompetence. There may be a feeling that these organizations are not competent to judge how bad a paper is, or whether there was culpable misconduct, and that a retraction is a major public statement. This may attract expensive litigation. A journal can publish a refutation without the editor making such a public statement.

It is to be hoped that editors who now refuse to retract will be embarrassed into doing so when the Database comes into operation.

## COST

The cost of this database is low. Most of the work can be passed onto the authors of refutations, who will complete the entries online and submit their papers to confirm that these exist – much as happens with ResearchGate and Academia.com. The editor and co-editors can weed out ones that do not meet the criteria. One might expect that universities would be happy to host the web site.

## PAYOFF

Economists will easily be able to find refutations that are, at present, invisible and this will produce a range of payoffs:

- Economists will not waste years working on long-discredited economics, whether theory or fact.
- Economists will not be able to suppress disagreement by not citing, or by misrepresenting critics.
- Bad research or fraudulent research will be exposed. Other researchers will avoid citing it, even if only because referees and others may assume that anyone who cites bad research is themself doing bad research.
- Economists will be able to find refutations of theory, technique, models, data etc. which impacts on some or all of the economics they use in their

work. They can respond by ignoring much of the literature that they have been relying on – the rubbish bin is an important research tool. They can modify their professional toolkit, removing some theory and techniques perhaps, and using others.

- Reading refutations gives them an idea of what constitutes a refutation. The refusal of journals to publish critical comments and refutations means that there is a generation of economists who may not know they exist. They do not know how to evaluate the literature.
- Reading a range of refutations outside their immediate project means that they learn about problems that may not immediately affect their work but could do in the future, and which almost certainly affect the literature they use. Obvious examples are bad survey methods, believing obviously false statistics because they are printed, p-hacking, selective publishing, and the suppression of inconvenient evidence. Readers become more competent in identifying rubbish in the literature and evidence they find.
- When papers or research programmes are refuted, it becomes much easier to produce alternatives. Many of the pitfalls have been identified and can be avoided.
- At present an unscrupulous author may publish careless work or fraudulent research in the belief that in the unlikely event that someone publishes a refutation it will soon be forgotten, so their reputation will not be damaged. This database will ensure that the refutation remains visible, so the damage to their career may be permanent. Those researchers who repeatedly do bad or fraudulent research will be identified.
- At present people who publish a lot, using bad or fraudulent research are likely to be promoted. Prospective employers and colleagues can be expected to use the database to weed out candidates who are likely to prove an embarrassment. Editors can be expected to use it to weed out suspect authors.

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