

Review #1:

This article provides a nice survey of the major methods used in economic research as reported in 10 economics journals. This line of work belongs, broadly, in the emerging meta-research of economics. There are great merits in such papers as they provide an overview of where the profession has been going, and hopefully shed light on what we need to do to improve economics as a science.

Major concern:

My one major comment is that the author looks at 3,415 research papers in 10 journals. While this is a large sample, it nevertheless represents only a fraction of what is published in economics. Readers might not be as convinced as the author about how representative the sample is of economics in general. Hence, I suggest that the author tones down some of the conclusions, at least slightly. It would be safer to restate the findings as trends and levels in these 10 journals rather than in economics overall. I hasten to add that the author might very well be correct; indeed, he is an experienced researcher and his insights and intuition might be correct. Nevertheless, we should all be mindful of the degree of exaggeration in empirical economics, as the author acknowledges is the case in primary empirical research; this tendency might well afflict us all! So, my recommendation is to soften the tone in some of the stated conclusions.

Minor issues:

1. The article needs another round of solid editing. I found typos and poor expression on many pages. Here are some examples: (i) last line in the abstract: "It show that". (ii) 2nd paragraph, page 3. I think you mean larger not lager! (iii) later on the same page I think you mean decrease in theory rather than decease of theory (iv) bottom of page 4 "It is papers," (v) page 6, re meta-studies, I think you mean quantitative rather than qualitative, (vi) page 10 "If they remains unused" etc etc.
2. Following from 1. there were some instances where the meaning of the text is unclear. For example, in the last line in the opening paragraph on page 2, you are arguing that truth is revealed 'using different methods'. It is not clear what you mean by 'methods' here. Do you mean that truth requires confirmation by theory, 'classic' empirics and cointegration techniques (ie the methods you are using to classify)? Or do you mean truth requires replication from different studies, using different econometric methods falling within the 'classic' method? Some of the terms are used loosely. For example, the author uses the term 'class' and 'classical' interchangeably, but it would be better to stick to one term. A class study might be seen as, eg. the Coase Theorem. Yes, the meaning becomes clear as one reads the paper but it might be better to sharpen the language. The term 'post-regression empirics', is particular unclear. This term could also refer to post regression diagnostics, i.e run regression and then assess the model. The author has in mind cointegration, unit root testing etc, some of which is done before regressions are run. So, this is unclear, and different terms might make for easier reading.
3. I didn't find the use of the letters and numbers to be a benefit to the paper. Indeed, its a distraction in some places, but Ill leave this up to the author to decide. At the very least the tables should be stand alone so that readers don't have to search for the labels, e.g. table A2 should replace the letters and numbers with words, or at least add words, as per table A1.
4. Third paragraph on page 2 you state that "I have found no method to escape some randomness in the choice". I think you mean subjectivity here. A random sample of journals would be ideal.
5. The use of the term 'General interest journal' may be challenged by some. I think many readers will regard some of the journals in the sample, e.g. the EJPE and PC as specialist field journals rather than 'general interest'. So, in one sense, you are combining some general interest journals (e.g. the Canadian Journal of Economics and the European Economic Review) with field journals. Heckman and Moktan have a classification that you can use. I am not suggesting that you change the journals included your survey, but you might want to consider changing how you describe them; or add a footnote to clarify.
6. The Heckman and Moktan study is now published.
7. In using the word exaggeration you seem to imply that this is always in favour of increasing effects. In general, I agree that this is the case. There are, however, instances where the exaggeration is in favour of smaller or no effect, eg as in test of the market efficiency hypothesis where there might be bias in favour of the null hypothesis.

8. I really liked your T-hacking idea. I hope you follow this up with a separate study!
9. I could not really see the logic of including surveys in your article. On the other hand, this is only a small fraction (only 68) but it just doesn't fit nicely with the categories of your survey of methods. I think this needs a bit more justification.
10. Page 15 you seem to be implying that its not possible to write a one page executive summary from a cointegration or Kalman filter study. I don't think this is correct.
11. It would be worthwhile looking at the recent paper by Abel Brodeur et al, "Methods Matter", AER. This investigates methods and publication bias.
12. You say that results tend to be 'too good'. I agree entirely. However, it might be useful to state clearly what you mean by 'too good'; do you mean that t-statistics are too high, the results confirm stated theory, confirm authors' priors, are presented in such a way to increase chances of publication, citation, or all of the above? Earlier you mention citations, but it might be useful to be more clear on the 'too good' point.

Review #2:

COMMENTS THAT MUST BE ADDRESSED:

1. (Abstract: "Economic theory predicts that such papers exaggerate, and the papers that have been analyzed by meta-analysis confirm the prediction. There is little reason to believe that other methods have smaller problems") This is an unusual statement to include in an abstract. It is not an original finding of your paper. It also doesn't seem to provide context for a major result of your analysis, which is the increase in the share of classical papers. If the share of classical papers is increasing, and these exaggerate, and other papers also exaggerate, then what is the significance of there being an increase in the share of classical papers? Either figure out a way to have this statement provide context for your finding, or drop it.
2. (Page 2, first paragraph: "all the methods...have problems as mentioned") I don't see where you have previously mentioned this. I suggest you drop "as mentioned".
3. (Page 2, first paragraph: "I do not imply that all – or even most – papers have the problem") You never state what "the problem" is. Please fix this.
4. (Page 2, second paragraph from the bottom, third line: "which are the journals, where most research economists publish.") Eliminate comma between "journals" and "where".
5. (Page 2, second paragraph from the bottom: "I have selected about 20% of the possible ones.") There are 150 B-level journals. You say that only half meet the criteria. That gives 75. You select 10. So where does the 20% come from?
6. (Page 3, second paragraph) You list what other studies have found. You do not explain how your study is different. I think you have two, non-mutually exclusive possibilities here. First, provide a criticism about the journals on which other studies have based their findings. Second, mention that -- in addition to you confirming that theory studies have declined -- you also find that the share of classical studies and stat methods and event studies have increased, and experimental studies show no trend. You need to provide a stronger statement supporting the value added of your paper.
7. (Page 4, last paragraph, second line: "motely") "Motely" isn't a word. Do you mean motley? You also use this word on page 14. Please fix this.
8. (Page 6, second paragraph: "This is a rather objective exercise where results replicate rather well.") Are you saying that mean effects estimated by meta-analyses replicate rather well? I need a citation for that, because I am aware of very, very few replications of meta-analyses on which such a statement could be based. Either provide a citation for this or drop the statement.
9. (Page 10, third paragraph): The sentence should read: "I have chosen only papers that are included as regular research articles." Please fix.

10 (Page 10, fourth paragraph). There is confusion between supply side and demand side. You mention number of researchers and the importance of publication as "supply side" factors here. Later, on page 11, you categorize these factors as "the demand for researchers for outlets for their work." On page 12, you also characterize these same factors as "demand factors." It is really confusing to the reader to have the same factors characterized by both "supply" and "demand." You should consistently use one or the other (I would go with supply, but that's your call).

11. (Page 11, first full paragraph: "From these arguments follows that the wave of publications...") Replace this with "From these arguments, it is my judgment that the wave of publications..."

12. (Page 13, first paragraph under Section 4.1). Add the following sentence at the end of that paragraph: "I attribute this drop to "theory fatigue".

13. (Page 16, m2: "Publication biases (exaggerations) are common...") Add to this sentence the following "...as evidenced by the fact that meta-analyses routinely reject the null hypothesis of no publication bias."

14. (Page 16, m3: "The meta-average estimated from all K studies normally converges, and for $K > 30$, the meta-average has normally distributed to a well-defined value.") I don't know what you mean by this. Please elaborate. If you keep this statement, you must provide one or more citations that can support the statement.

15. (Page 17, first line: "The exaggeration is largest in the beginning of a new literature, but gradually it becomes smaller.") You must provide one or more citations that support this statement, or eliminate it.

OPTIONAL (you can ignore if you want):

16. (Page 3, last paragraph: "The increase in the production of papers is caused by two factors: The number of researchers. The importance of publications for the careers of researchers.") Maybe refer to this as the intensive and extensive margins of research?

17. (Page 8, third paragraph: "Newer techniques...hazard functions...") The inclusion of hazard functions seems unusual. As far as I know, the seminal work on hazard functions goes back at least to the 70s with multiple papers by Kalbfleisch and Prentice. Maybe consider excluding this from the list of newer techniques?

18. (Page 8, third paragraph: "Newer techniques".) Would you include matching methods? Would you call those methods "dull dishes"?

19. (Page 10, fourth paragraph). Just a comment. How do you not count an increase in the number of researchers as both a demand and supply factor? More researchers means more people reading journal articles. More readers means journals are more profitable, which means more journals will want to enter the market. I think that deserves a mention, but if you do include it, it kind of kills your argument. You can decide how to handle this.