

January 20, 2018

Dear Professor Coupé,

I have now received reports from three reviewers regarding your manuscript, “Replicating “Predicting the present with Google trends” by Hyunyoung Choi and Hal Varian (The Economic Record, 2012),” (*Manuscript Number 2350; Discussion Paper Number 2017-76*).

Based on the feedback I have received, I am inviting you to submit a revision. Your revision should address the individual points raised by each of the reviewers. In addition, you should include a separate document that provides a point-by-point response to each of the reviewer’s comments. You are not required to do everything the reviewers say, but if you disagree with a recommendation, you should state your reason. A successful revision will include addressing the following:

1) Reviewer 2 makes the point that calling the different types of replications “steps” is confusing. I agree. Instead, label and refer to these as three “types” of replications (Type I, Type II, Type III).

2) Reviewers 2 and 3 both suggest that each type of replication has its own purpose. Is the purpose of the replication to confirm the results that Choi and Varian (2012) report? Or to make some generalizations about the usefulness of using Google trends to get better predictions? The answer likely depends on the type of replication. Your revision should elaborate on how each of your replication “types” has a somewhat different purpose. This is important for being able to properly interpret the results of the respective replications.

3) Related to the previous comment, suppose one finds that the results “do not replicate.” Reviewers 2 and 3 suggest that the conclusions one would draw depend on the type of replication being done. Your revision should elaborate on this.

4) I agree with Reviewer 1 that too much space is devoted to why Choi and Varian (2012) received more citations than Ettredge et al. (2005). Of greater relevance is the value-added, if any, of CH over E. Did E not sufficiently demonstrate the utility of web-based search terms? Did CH show that one type of search term (Google trends?) was better at prediction than others? A better understanding of this could inform an improved discussion of how to interpret the results of your planned replication. In other words, as you revise your manuscript and offer more clarity on how to interpret the results of your replication, you may find it useful to better appreciate CH’s contribution to the literature.

5) Given that the focus of CH is on prediction, it is surprising to me that you identify R-squared, coefficient estimates, and statistical significance as appropriate indicators of “replication success.” Similarly, your response to Reviewer 2 seems strange: “...one could compute the share of numerical results that can be replicated.” Shouldn’t the appropriate measure of replication success be whether including web-based search terms improves prediction? One would imagine that a corresponding measure of “replication success” would then be some measure of forecasting performance, such as one-step-ahead RMSE, MAE, or MAPE. Some discussion of this is warranted.

6) Given that you are predicting across a number of different series, how should one interpret the results if your replication confirms CH for some series, but not for others? This would

seem to go back to the purpose of your replication. Are you mostly interested in assessing the veracity of CH? Or are you interested in determining the generalizability/robustness of using web-based search terms for prediction? A discussion of how to handle multiple comparisons in the context of a replication would be valuable to your readers.

A revision that satisfactorily addresses the points above, as well as responding to the individual reviewers' concerns, is likely to result in a favourable publication decision.

Thank you for submitting your manuscript to *Economics: The Open-Access, Open-Assessment E-Journal*. I look forward to receiving your revision.

Sincerely,

W. Robert Reed  
Co-Editor, *Economics E-Journal*