A Framework for Open Policy Analysis
Fernando Hoces de la Guardia1,2, Sean Grant2, Edward Miguel1,3
1Berkeley Initiative for Transparency in the Social Sciences, University of California, Berkeley
2Indiana University Richard M. Fairbanks School of Public Health
3University of California, Berkeley, Department of Economics

What is Policy Analysis?
- Research generates evidence for one setting in the past that is meant to inform several policy discussions in the future, in likely different settings. This contextualization of the evidence is what policy analysis does.
- Evidence-based policy making has gained traction in recent decades.
- Improvements on the evidence-generation side: credibility revolution (causality) & new emphasis on transparency.

Why is Open Science Relevant for Policy Analysis?
Policy analysis, like science, has a credibility crisis (Man- ski, 2013). Incentives for p-hacking the data, cherry picking evidence, and hiding code and data are the same as in research (but the stakes are much higher).

We highlight three main problems from lack of transparency and reproducibility:
- Problem 1: Decision makers can cherry pick their own facts among multiple (equally incredible) analyses.
- Problem 2: Hard to automate reports over time or across regions. Many analysts are reinventing the wheel for analysis that repeat over time and geographies.
- Problem 3: Researchers cannot know how their work is used in policy reports, or explore where the largest unknowns are in a policy analysis.

The Open Science response to the Reproducibility Crisis, provides us with tools, language and a road-map to address these problems.

Problem 3:
Case studies to help accelerate the transition to Open Policy A.
Community guidelines for Open Policy A, similar to TOP Guidelines for science.

Expected Benefits and Likely Barriers
Expected benefits: reducing space for ideological empir- ics; facilitates automation, and makes easier for researchers to connect with policy analysis.
Likely barriers: policy analysts might not like to disclose work that was done under a tight timeline; and reproducibility could be in direct opposition to consultants that repackage similar analysis across different settings.

A Conceptual Framework for Open Policy Analysis

Figure 1: Policy-making with low credibility in research and policy analysis.

Similar to Miguel et al. (2014) we propose high level norms for Open Policy Analysis, and outline details behind each norm following a similar structure as Nosek et al. (2015).

What is Open Policy Analysis?
We propose three high level principles as a starting point: Open output, analysis, and materials.
1. Open output calls for one clear output for policy makers (as opposed to an entire report to read selectively) plus clear connection between that output and its under- lying assumptions.

Open materials: https://github.com/BITSS/opa-wealthtax

Next Steps
- Community guidelines for OPA, similar to TOP Guidelines.
- Case studies to help accelerate the transition to OPA.
- Convenings to build a community and highlight pio- neers (like OSPC, GiveWell, and others).

References

Application: Wealth Tax Policy Analysis
Saez & Zucman (2019) performed a policy analysis for proposal to implement a wealth tax in the US. In collabora- tion with BITSS the authors agreed to open their original analysis into three components:

Open Output
- Unified output - Clear output-input link

Open Analysis
- Open Code
- Open Report
- Label data, research & guesswork

Open Materials
- Common file structure
- Open Data (raw & final)
- Make code/spreadsheets reproducible
- Use a version control

Correspondence concerning this article should be addressed to Fernando Hoces de la Guardia, Berkeley Initiative for Transparency in the Social Sciences, Center for Effective Global Action, University of California, Berkeley, 714C University Hall, Berkeley, CA, United States, 94720-3310. Email: fhoces@berkeley.edu. Phone: (+1) 510-642-4361.

Acknowledgments: We would like to thank Kristine Brown, Susan Paddock, Christopher Smith, Jennifer Sturdy, Chapin Harriman, the Congressional Budget Office, and the Goldman School of Public Policy for many helpful discussions and suggestions.

This paper was build using the template from http://templates.berkeley.edu/aga/