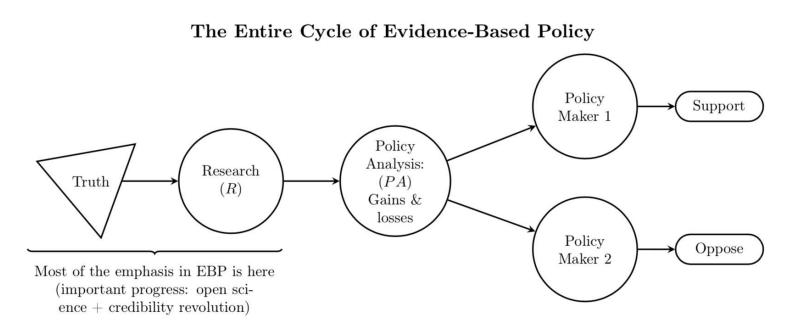


### What is Policy Analysis?

- 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 (Manski, 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:

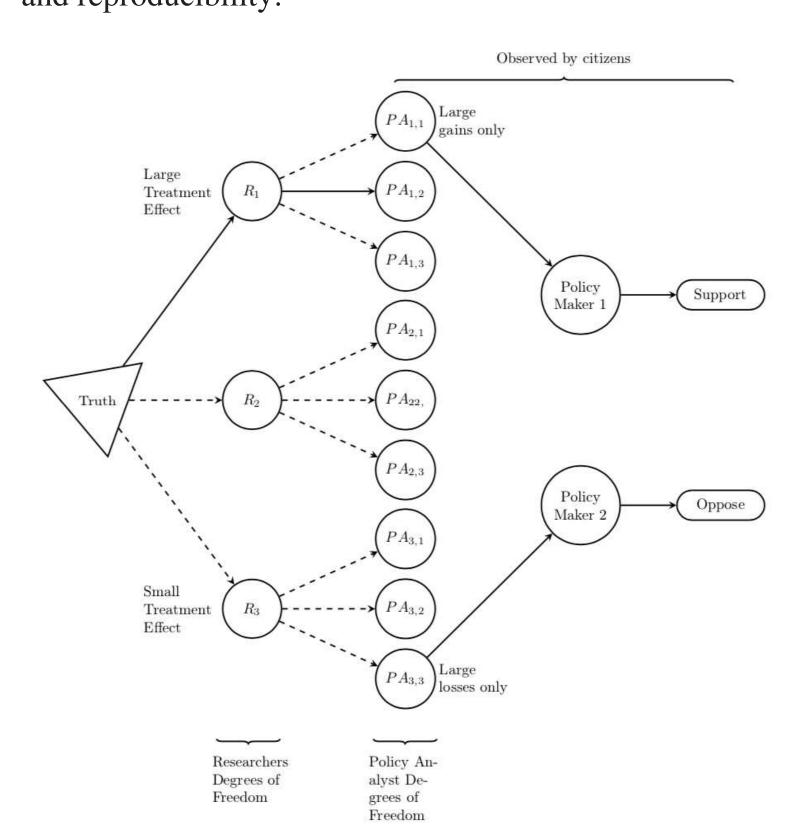


Figure 2: Policy-making with low credibility in research and policy analysis  ${\cal P}$ 

## A Framework for Open Policy Analysis

Fernando Hoces de la Guardia<sup>1</sup>, Sean Grant<sup>2</sup>, Edward Miguel<sup>1,3</sup>

<sup>1</sup>Berkeley Initiative for Transparency in the Social Sciences, University of California, Berkeley <sup>2</sup>Indiana University Richard M. Fairbanks School of Public Health <sup>3</sup>University of California, Berkeley, Department of Economics

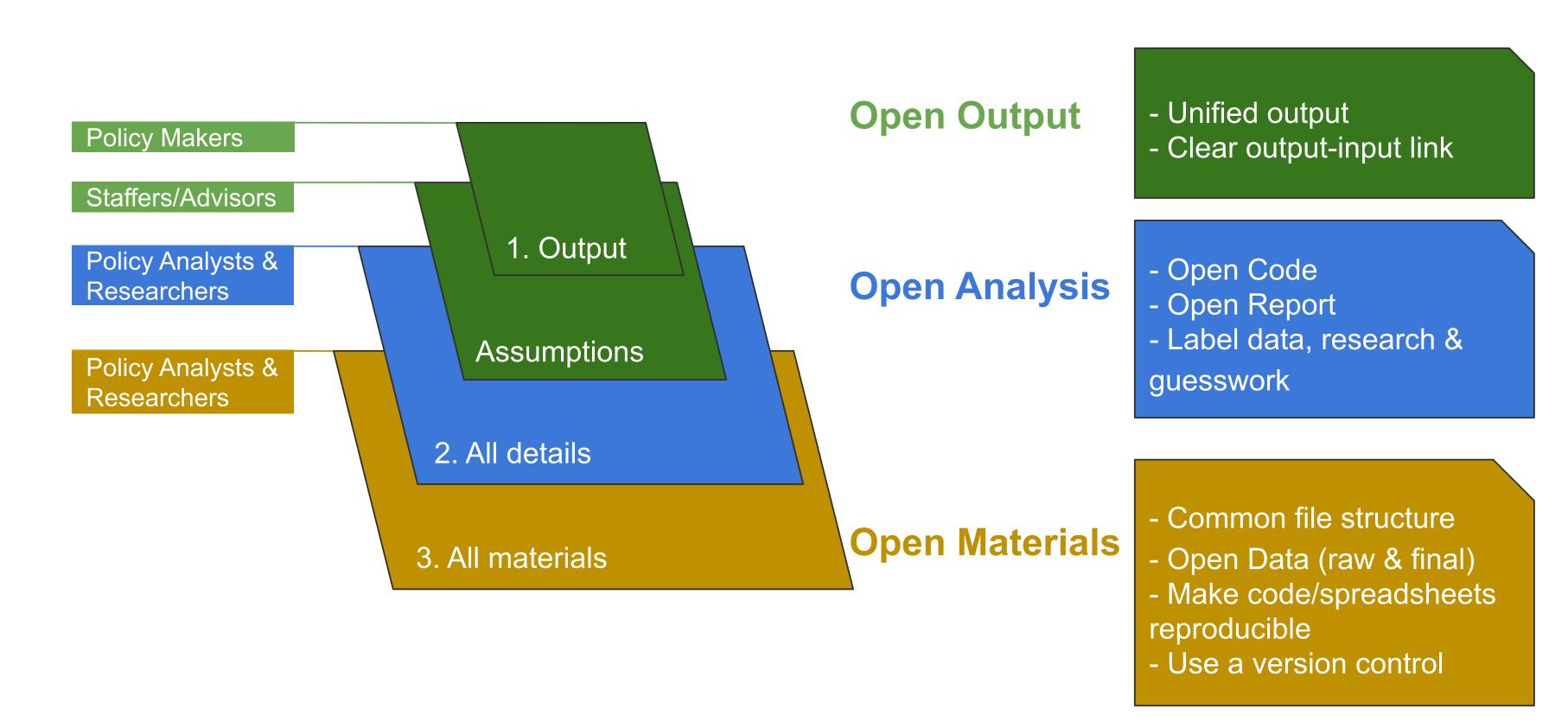
- **Problem 1:** Decision makers can cherry pick their own facts among multiple (equally incredible) analyses.
- **Problem 2:** Hard to automate reports over time or across regions. Many analysts are reinventing the wheel for analysis that repeat over time and geographies.
- **Problem 3:** Researchers 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.

- 2. **Open analysis** calls for a complete and clear documentation of the methodology behind the output. This includes, and ideally embeds, the underlying code
- 3. **Open materials** refers to access to all the necessary materials to reproduce all the analysis from beginning to end.

For each principle, we provide specific dimensions of improvements. Our goal is to lay the foundations for something similar to TOP guidelines for policy analysis. Details on each dimension in the paper.

### A Conceptual Framework for Open 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 underlying assumptions.

## Expected Benefits and Likely Barriers

**Expected benefits:** reducing space for ideological empirics, facilitates automation, and makes easier for researchers to connect with policy analysis.

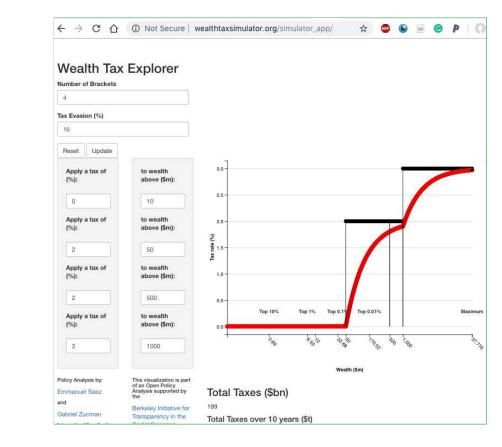
Likely barriers: policy makers cannot choose among analyses; policy analysts might not like to disclose work that was done under a tight time-line; and reproducibility could be in direct opposition to consultants that repackage similar analysis across different settings.



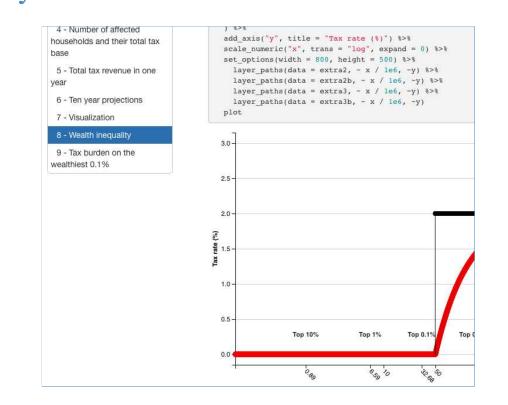
## Application: Wealth Tax Policy Analysis

Saez & Zucman (2019) performed a policy analysis for proposal to implement a wealth tax in the US. In collaboration with BITSS the authors agreed to open their original analysis into three components:

#### Open Output



#### Open Analysis



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 pioneers (like OSPC, GiveWell, and others).

#### References

Manski, C. F. (2013). *Public policy in an uncertain world: analysis and decisions*. Harvard University Press.

Miguel, E., Camerer, C., Casey, K., Cohen, J., Esterling, K. M., Gerber, A., ... others (2014). Promoting transparency in social science research. *Science*, *343*(6166), 30–31.

Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., . . . others (2015). Promoting an open research culture. *Science*, *348*(6242), 1422–1425.

Saez, E., & Zucman, G. (2019). Letter to Senator Elizabeth Warren. https://tinyurl.com/y6qpkzpy. (Accessed on 08/01/2019)

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 Hall, Berkeley, 714C University Hall, 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 White, and seminar participants at the Berkeley Initiative for Transparency in the Social Sciences, the Congressional Budget Office, and the Goldman School of Public Policy for many helpful discussions and suggestions.

This poster was build using the template from http://wifo.eecs.berkeley.edu/latex/

