Can our research improve corporate social and environmental practices?

Professor Andrew King
Allen Questrom Professor of Management
Questrom School of Business at Boston University
The “No” position.

Hardest to argue
Contradicts thirty years of my life
Denies our hopes
Depressing
Gloomy
Sad
First let’s clarify the debate proposition.

Can *Our Research* [...] *Improve* Corporate *Social and Environmental Practices*?

- *Our* – management scholars
- *Research* – the creation of knowledge (justified belief)
  - Assumption: our work is usually empirical
- [...] – agent implementing improvement is missing
  - Assumption: others, such as managers, etc.
- *Improve* – increase welfare through modifications
- *Social and environmental practices*
  - Practices effecting side effects of companies
Background Reading

- Public intellectuals have been replaced by thought leaders.
- Learning from empirical research is fraught with risk. Research reporting should change.
- Popular, sugary, ideas for solving social-environmental problems are unsupported and dangerous.
Can we create knowledge that (helps others) improve (net welfare by effecting) social and environmental practices?

- **No** is both the default answer, and the answer most likely to be true.
“No” as the default (NULL) condition.

Ho: We cannot create knowledge that helps others improve net welfare by effecting social and environmental practices.

- To reject the NULL, “Yes” must show that our creation of “knowledge” generates improvement.

- A possible test: HBR could conduct an experiment where it published our articles for six months, and then published articles sourced from random people for six months. If corporations improve faster subsequent to “our” articles, we might be able to reject the “No” position.

- Since no such test has been conducted, “No” is retained.
“No” is the answer most likely to be true.

- “Yes” requires a number of conditions
  1) We produce useful knowledge.
  2) Our knowledge is published.
  3) Our knowledge is picked up by forums users see.
  4) User selects our knowledge for adoption.
  5) Users adopt our knowledge appropriately.

- Each of these steps is perilous and easily perverted by interest.
The Funnel of Knowledge Exclusion

Knowledge Creation → Publication → Popularization → Selection → Adoption

- True
- Type 1 Errors
- Spurious claims (BS)

Hyperbolic Bullshit Injection

Boston University Questrom School of Business
1) Creating Knowledge

- We produce a mix of justified claims (knowledge), unjustified claims (notions), and spurious claims (nonsense).
  - We misunderstand the basis for our claims.
    - \( p < 0.05 \) does not say anything about the truth of the hypothesis.
  - We fail to account for epistemic uncertainty.
    - We estimate aleatoric uncertainty and ignore epistemic uncertainty.
  - Some of us engage in questionable research or reporting practices.
    - HARKing, p-hacking, evaluation of multiple models.
  - The “Thought Leaders” among us seem to lack any understanding of epistemology.
    - “18 cases and a popular exec-ed program” is sufficient justification.
2) Publication

- Excludes “non-findings”
  - How often have you been able to publish a nonsignificant result?

- Emphasizes “interesting” findings.
  - “Interesting” results are more likely to be wrong.
    - The special danger of female hurricanes.
  - Published findings bounce back and forth over multiple rounds.
    - Publications in SMJ on ESG and financial performance.

- Fails to correct false findings.
  - People on this call (and many others) have tried to fix glaring errors in highly cited papers, but without success.
  - Replications remain extremely rare and hard to publish, so erroneous estimates proliferate.
    - Brent Goldfarb and I estimate 20-40% of published findings are Type 1 errors.
3) Popularization

- **Exclusion of “non-findings”**
  - Try getting a non-finding about ESG investing in *The NY Times*.

- **Preference for “happy” findings**
  - Win-win ideas for voluntary business action.

- **Limited outlets.**
  - HBR dominates business publication.
4) Selection

- Readers cannot assess the researcher's assumptions or methods, so they must trust the researcher.
- Appealing and bold ideas are more likely to be selected.
- Thought leaders know this:
  - “From time to time … innovations have the potential to ‘trickle up’ from poor to rich countries (Global Strategy Journal),
  - becomes
  - “Reverse Innovation will transform just about every industry, including energy, healthcare, transportation, housing, and consumer products.”
“No” is the answer most likely to be true.

- “Yes” requires a number of conditions
  1) We produce useful knowledge
     But mixed with false and spurious findings.
  2) Our knowledge is published.
     But selection increases false results.
  3) Our knowledge is picked up by forums users see.
     But slick notions more enticing than awkward knowledge.
  4) User select our knowledge for adoption.
     But users cannot discern knowledge from notions.
  5) Users adopt this knowledge.
     \[ P(A|K) \approx 0. \]
Some possible objections:

- Yes, the situation is bad, but no harm is done.
- Yes, but what can we do?
...but no harm is done.

- Actually, alluring ideas have caused harm.
…but what can we do?

1) Return to being Drezner’s public intellectuals.
2) Use epistemic uncertainty analysis, particularly to test and aggregate existing research.
Perform Model Uncertainty Process

Select a set of assumptions that are uncertain and allow these to vary. Bound the window by assumptions that are more certain.
Replicated Estimate

Epistemic uncertainty

Figure 2: Marginal Effects at Average — All Models
…but what can we do?

1) Return to being Drezner’s public intellectuals.
2) Use epistemic uncertainty analysis; test and aggregate existing research.
3) Demand that journals require better standards of epistemology and testimony.
4) Translate for practitioners: write for popular outlets.
5) Speak up.

All five conditions are needed to turn the answer to the proposition from “no” to “yes”.
THANK YOU!