



Retrospective Analysis: Finding Regulations That Work (and Those That Do Not)

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Why Retrospective Analysis?



Why Retrospective Analysis?

Three Sets of Reasons

1. Cognitive
2. Institutional
3. Policy learning

1. Cognitive

Two Systems of the Human Mind

System 1: reflexive, automatic, intuitive

System 2: conscious, deliberate, rational

THINKING,
FAST AND SLOW



DANIEL
KAHNEMAN

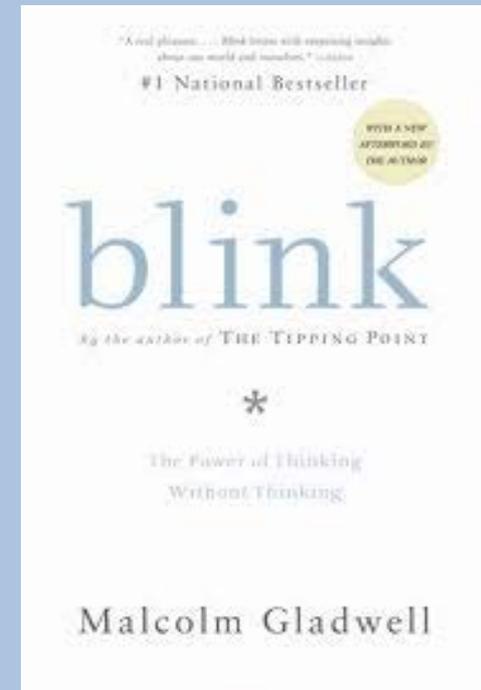
WINNER OF THE NOBEL PRIZE IN ECONOMICS

“System 2 is mobilized when a question arises for which System 1 does not offer an answer, [such as] the multiplication problem 17×24 .”

When to Blink?

“I think that the task of figuring out how to combine the best of conscious deliberation and instinctive judgment is one of the great challenges of our time.”

Gladwell (2007)



... and When to Think?

“Our most important policy decisions – about the economy, jobs, health care, defense, the environment, and foreign relations – require that smart people spend long periods of time thinking strategically.”

Partnoy (2012)

FRANK
PARTNOY
—
WAIT
—
THE ART
AND SCIENCE
OF DELAY



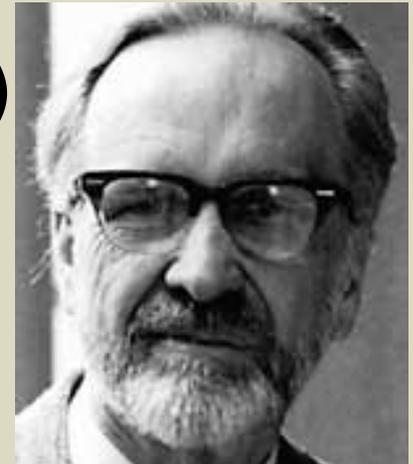
Two Modes of Policy Decision Making

Synoptic (Rational Comprehensive)

- Values and goals are broad but comprehensible
- Every alternative is explored, every factor considered
- Based on well-confirmed theory

Incremental (Boundedly Rational)

- Values and goals are narrowly defined, sometimes unclear
- Limited number of alternatives examined
- Builds on prior experience more than on theory



Charles Lindblom

Two Types of Policy Analysis

Prospective:

**Regulatory Impact
Analysis/Assessment (RIA)**

Retrospective:

**Regulatory Impact
Evaluation (RIE)**

2. Institutional

Statutory Requirements

Regulatory Flexibility Act (1980)

- Agencies must review regulations having “a significant economic impact upon a substantial number of small entities”

Specific Statutory Mandates

- For example, Clean Air Act Amendments of 1990 mandated that EPA conduct a retrospective analysis of its air pollution regulations.



Administrative Conference of the United States **Recommendation 2014-5 · December 2014** **Retrospective Review of Agency Rules**

- Retrospective review is “robust feature” of rulemaking
- New regulations, “where appropriate,” should “establish a framework for reassessing the regulation in the future.”
- “The level of rigor of retrospective analysis ... should be tailored to the circumstances.”
- Agencies should try to “employ statistical tools to identify the impacts caused by regulations”

Presidential Action on Retrospective Review: Carter to Obama

Table 1. Executive Orders and Related Administration Announcements on Retrospective Review of Regulations

Administration	Administration Policy Document	Date
Carter	Executive Order 12044: Improving Government Regulations	March 23, 1978
Reagan	Presidential Task Force on Regulatory Relief	January 22, 1981
Reagan	Executive Order 12291: Federal Regulation	February 17, 1981
Reagan	Executive Order 12498: Regulatory Planning Process	January 4, 1985
Bush I	Memorandum on Reducing the Burden of Government Regulation	January 28, 1992
Clinton	Executive Order 12866: Regulatory Planning and Review	September 30, 1993
Bush II	Draft Report to Congress on the Costs and Benefits of Federal Regulations	May 2, 2001
Obama	Executive Order 13563: Improving Regulation and Regulatory Review	January 18, 2011
Obama	Executive Order 13579: Regulation and Independent Regulatory Agencies	July 11, 2011
Obama	Executive Order 13609: Promoting International Regulatory Cooperation	May 1, 2012
Obama	Executive Order 13610: Identifying and Reducing Regulatory Burdens	May 10, 2012

Notes: All documents accessible via hyperlinks in electronic version of this report.

Source: Aldy (2014)

Trump Executive Order 13,771 (2017)

“[A]ny new incremental costs associated with new regulations shall, to the extent permitted by law, be **offset by the elimination of existing costs** associated with at least two prior regulations.”

<https://www.whitehouse.gov/the-press-office/2017/01/30/presidential-executive-order-reducing-regulation-and-controlling>

OMB Interim Guidance on Executive Order 13771 (“One-In-Two-Out”) (2017)

Q: Can agencies use previously estimated costs from an original Regulatory Impact Analyses (RIA) in determining the cost savings generated by an eliminated regulatory action?

A: In general, no. While the original RIA may have information that will be useful in calculating cost savings, the most current information available on projected cost savings (e.g., new information on the cost of operating compliance technologies) must be included to the extent feasible. Agencies are also strongly encouraged to use program evaluations and similar techniques to determine the actual cost and other effects of eliminating regulatory actions.

<https://www.whitehouse.gov/the-press-office/2017/02/02/interim-guidance-implementing-section-2-executive-order-january-30-2017>

Trump Executive Order 13,777 (2017)

“ Each Regulatory Reform Task Force **shall evaluate existing regulations ... and make recommendations to the agency head regarding their repeal, replacement, or modification**, consistent with applicable law.”

<https://www.whitehouse.gov/the-press-office/2017/02/24/presidential-executive-order-enforcing-regulatory-reform-agenda>

Burden-Reduction Focus

Agencies should “consider how best to **promote retrospective analysis of rules** that have become **outmoded, ineffective, insufficient, or excessively burdensome**, and to **modify, streamline, expand, or repeal** them in accordance with what has been learned.”

Obama Executive Order 13,563

3. Policy Learning



THE GOOD THE BAD AND THE UGLY



Administrative Conference of the United States
Recommendation 2017-6 · December 2017
Learning from Regulatory Experience

“Agencies should seek opportunities to collect data to learn the most effective way to design their rules and analyze the effects of their rules.”

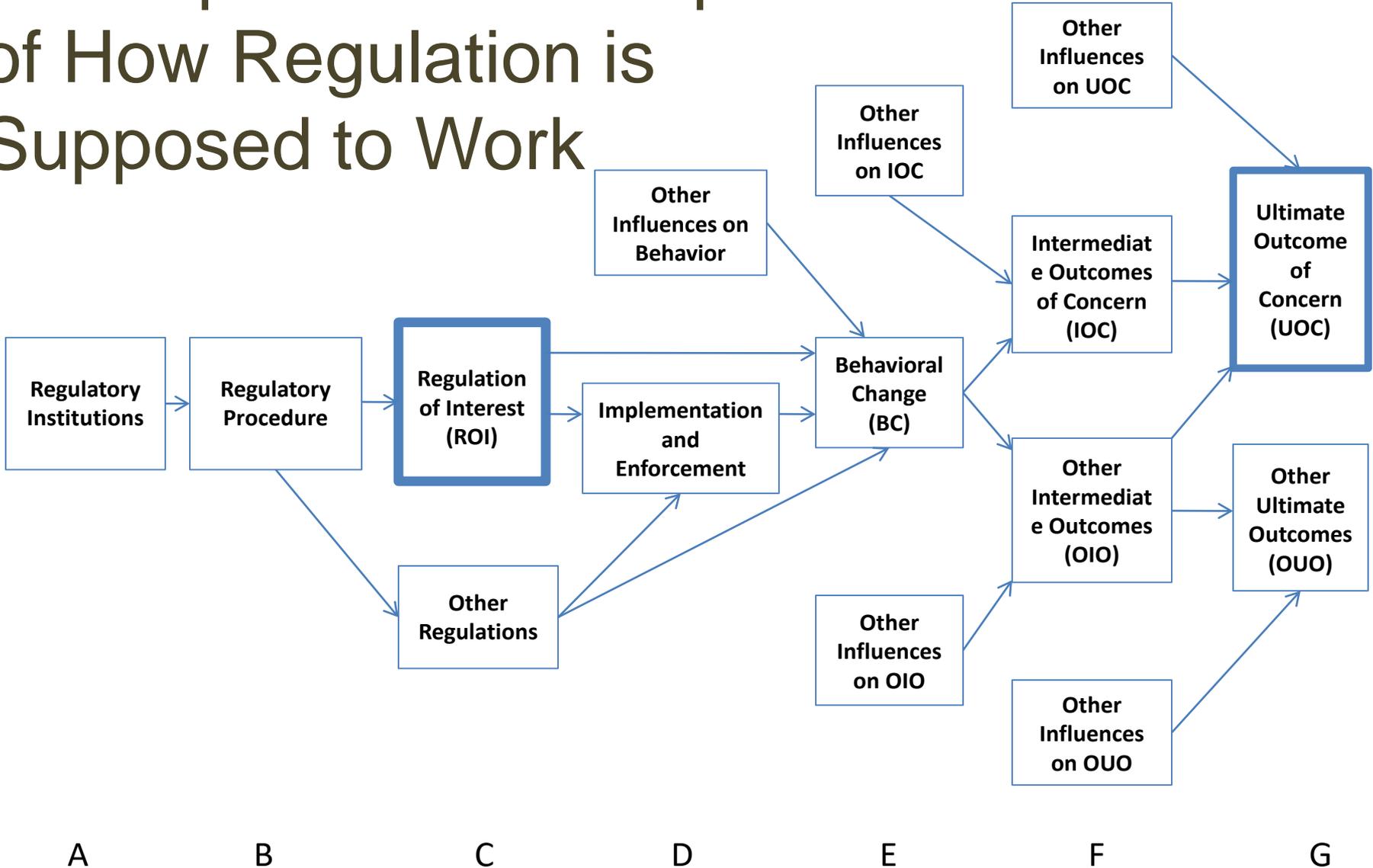
Criteria for Selecting Rules to Review



- (a) **Likelihood of improving attainment of statutory objective;**
- (b) **Likelihood of increasing net benefits and magnitude of those potential benefits;**
- (c) **Uncertainty about the accuracy of initial estimates of regulatory costs and benefits;**
- (d) **Changes in the statutory framework under which the regulation was issued;**
- ...
- (f) **Changes in underlying market or economic conditions, technological advances, evolving social norms, public risk tolerance, and/or standards that have been incorporated by reference;**

...

A “Simple” Causal Map of How Regulation is Supposed to Work



Source: Coglianese (2012)

Types of Evaluation

1.Regulatory Administration

2.Behavioral Compliance

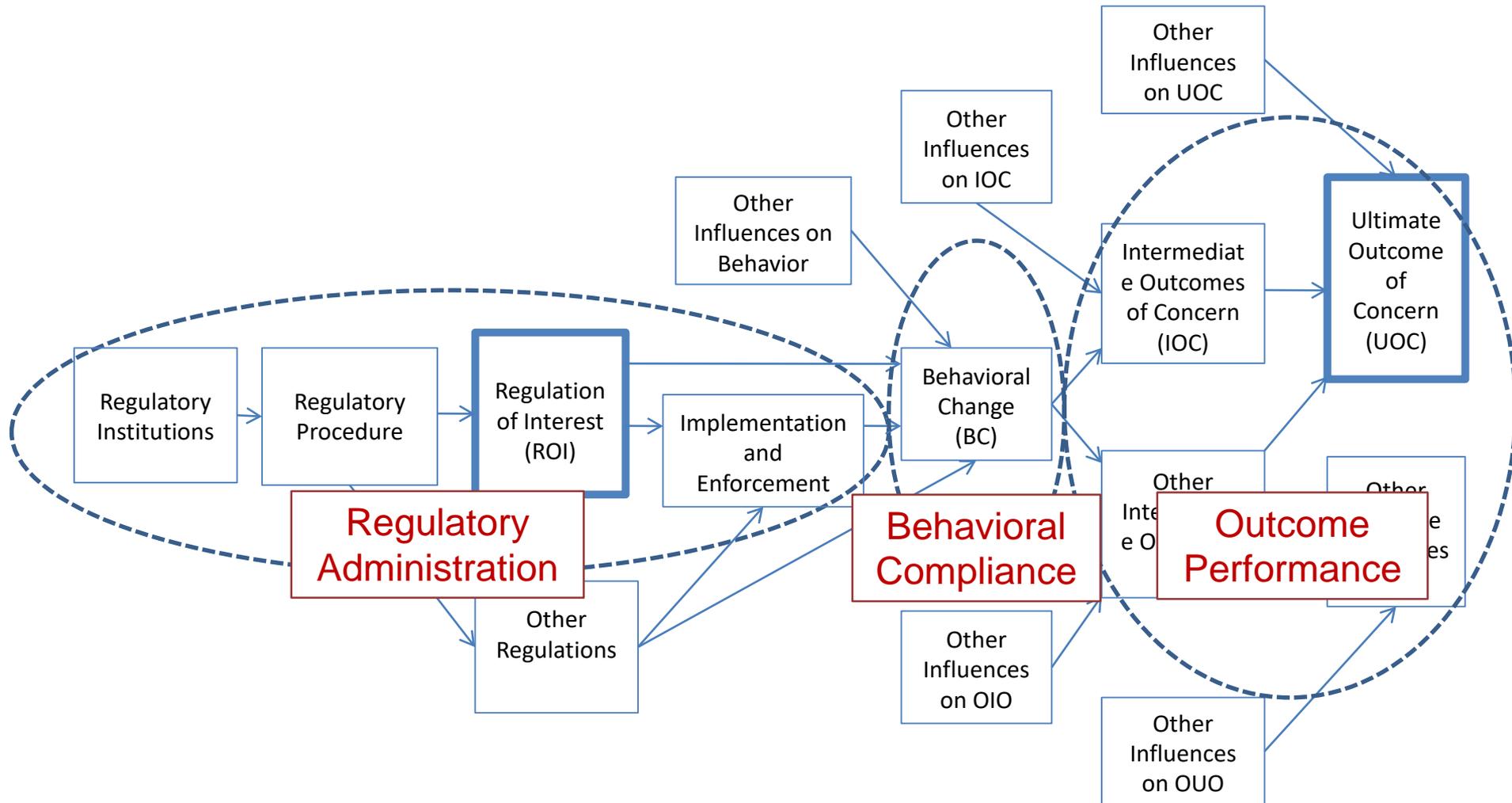
3.Outcome Performance

Types of Indicators in Regulatory Evaluations

Activities

Behaviors

Outcomes



The Role for Causation in Outcome Performance Evaluations

(Non-Attributional) Lookback:

- Not concerned with causation
- Asks: To what extent are outcomes getting better

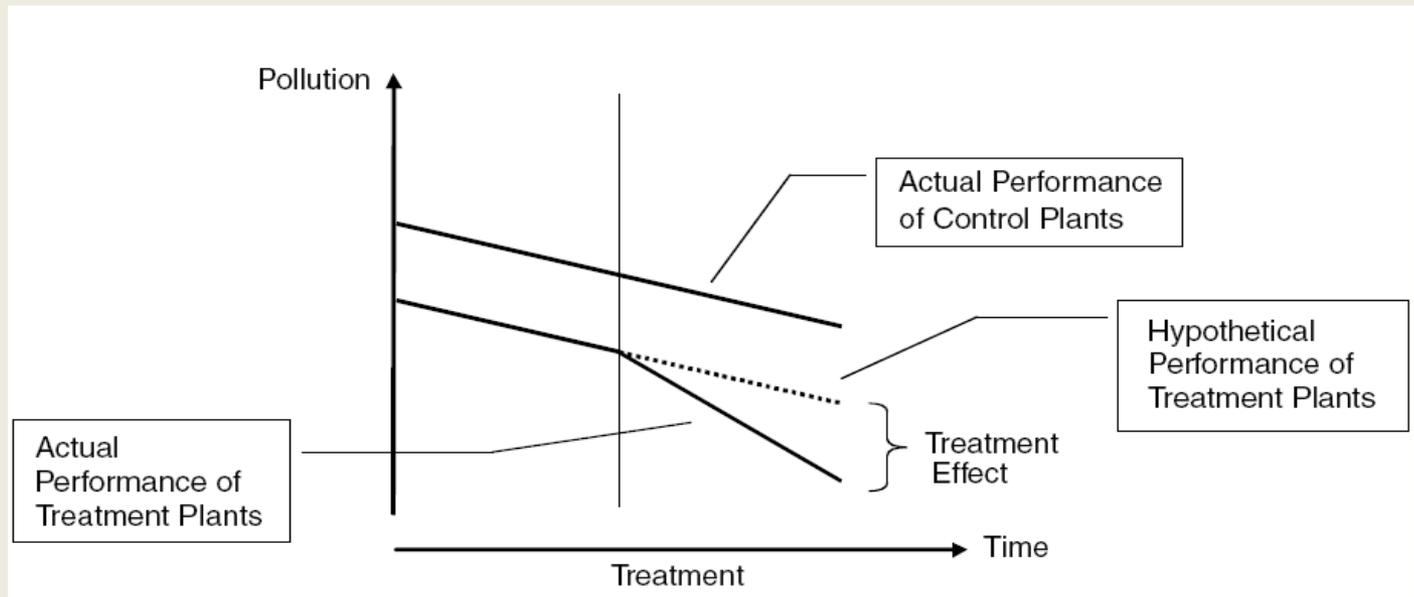
(Attributional) Evaluation:

- Seeks to attribute causation
- Asks: To what extent did policy/program cause any change in outcomes

Benneer (2007)

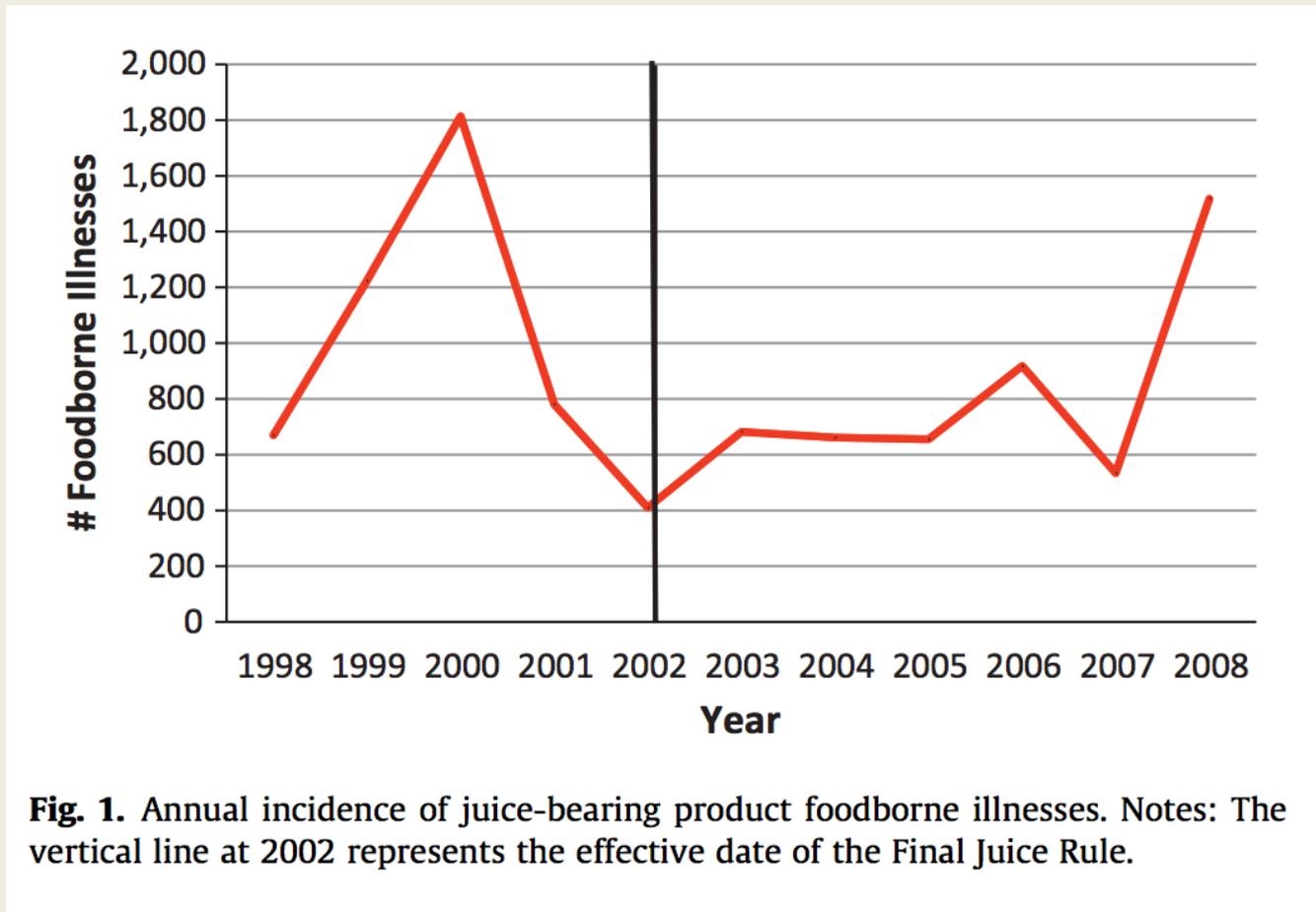
- Data on toxic emissions from 30,000+ facilities across the United States
- **Differences-in-differences statistical analysis**, comparing facilities in states with and without planning laws
- *Management-based regulation associated with a 30% decrease in toxic emissions*

Illustration of
Differences-in-
Differences
Estimation
Technique



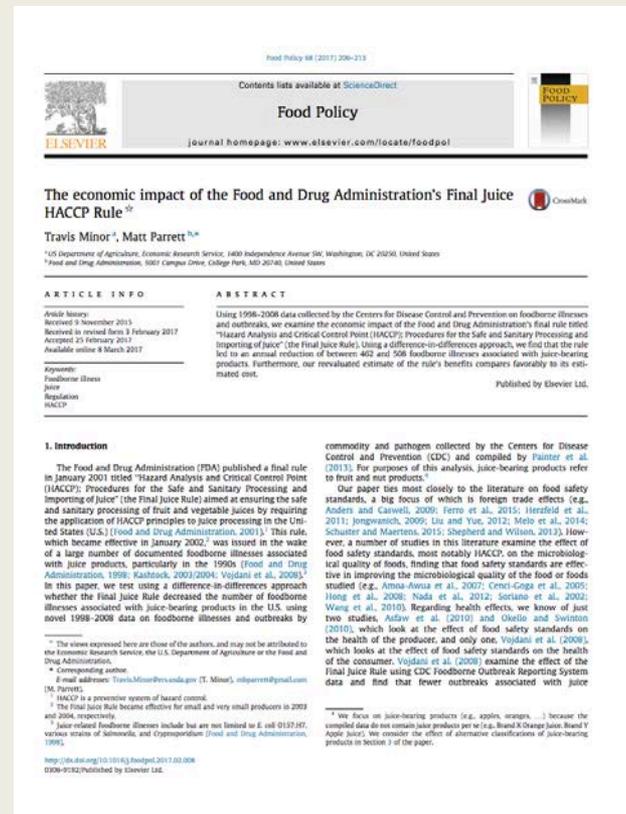
Minor & Parrett (2017)

- *FDA's fruit juice HACCP*
- *Metric: Juice related foodborne illnesses*



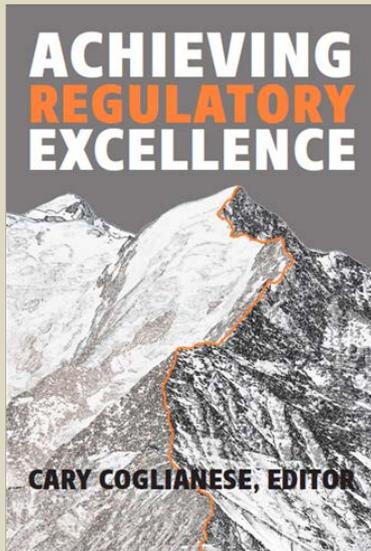
Minor & Parrett (2017)

- *FDA's fruit juice HACCP*
- *Metric: Juice related foodborne illnesses*
- *Difference-in-differences analysis*
- *Finding: HACCP associated with an annual reduction in 462-508 juice-related foodborne illnesses*



Why Evaluation is Vital

“Only evaluation can begin to explain reliably why problems are getting better (or worse) and whether the work of the regulator has anything to do with whatever change occurred.”



Coglianese (2017)

The End... (No, Just the Beginning)

