Regulatory Impact Analysis in the United States
Improving the Efficiency and Effectiveness of Regulation

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Agenda

Using Benefit-Cost Analysis

Steps to Conducting Benefit-Cost Analysis

RIA Light

Using Benefit-Cost Analysis

- Provides a systematic way for identifying and evaluating the likely outcomes of alternative regulatory choices
- Evaluates the incremental benefits and costs
- The size of the net benefits indicates whether one policy is more efficient than another (absolute difference between benefits and costs)
- Should try monetize or quantify, where possible
- In the US, the Office of Management and Budget's (OMB's) Circular A-4 provides guidance to Federal agencies on the development of regulatory analysis as required under Executive Order 12866.

Steps: Benefit-Cost Analysis

Step 1: Describe the need for the regulatory action

- What is the problem you are trying to address?

Step 2: Define the Baseline

- What would the world be like absent the regulation?

Step 3: Set the Time Horizon of Analysis

- How long is the regulation likely to have economic effects?

Steps: Benefit-Cost Analysis

Step 4: Identify a Range of Regulatory Alternatives

- What feasible and effective regulatory alternatives are possible? What flexible regulatory approaches are possible?

Examples:

- Market-oriented approaches (economic incentives)
- Information disclosure
- Performance standards rather than design standards
- Requirements based on firm size
- Requirements based on geographic regions
- Enforcement methods

Steps: Benefit-Cost Analysis

Step 5: Identify the Consequences of Regulatory Alternatives

- Identify the potential benefits and costs that can be monetized, and their timing
- Identify the potential benefits and costs that can be quantified, but not monetized, and their timing
- Identify benefits and costs that cannot be quantified
- What are advantages and disadvantages of alternatives? Risks?

Steps: Benefit-Cost Analysis

Step 5: Identify the Consequences of Regulatory Alternatives

- Those who bear the costs of a regulation and those who bear the benefits are often not the same people
  - Provide a separate description of distributional effects

Steps: Benefit-Cost Analysis

Step 6: Quantify and Monetize the Benefits and Costs

<u>Monetizing Costs:</u>

- Costs generally fall into two categories
  - One-time (i.e., implementation) costs
    - Planning, training and construction
  - Recurring (i.e., Operating and Maintenance (O&M) costs)
    - Inspection, training and recordkeeping
- Sensitivities
  - Lack of homogeneity
  - Uncertainty of cost drivers

Steps: Benefit-Cost Analysis

Step 6: Quantify and Monetize the Benefits and Costs

<u>Monetizing Benefits</u>

- All benefits must be accounted
  - Monetized, quantified, or qualified
- Must analyze benefits for both the proposed option and major alternatives
- All monetized benefits must be discounted at 7% and 3% discount rates
- Subtract the costs from the benefits to provide the net benefits for each alternative
- Discuss qualitative benefits in detail

Steps: Benefit-Cost Analysis

Step 7: Discount Future Benefits and Costs

- Based on OMB Circular A-4
- Benefits and costs do not always take place in the same time period.
- Step 1:
  - Present the annual time stream of benefit and costs expected to occur from the rule, identifying when the benefits and costs occur
  - Begin when the final rule should go into effect and end at a point to encompass all significant benefits and costs likely to occur from the rule
- Step 2:
  - Discount benefits and costs to constant dollars

Steps: Benefit-Cost Analysis

Step 7: Discount Future Benefits and Costs

- Discount Formula
  - 1/(1+discount rate)^time
- Seven percent (7%)
  - Base case for analysis
  - Estimate of the average before-tax rate of return to private capital
- Three percent (3%)
  - Rate at which society discounts future consumption
  - Social rate of time preference

Steps: Benefit-Cost Analysis

Step 8: Evaluate Non-quantified and Non-monetized Benefits and Costs

(1) Qualitative Benefits and Costs

(2) Breakeven Analysis

- How small could the value of the non-monetized benefits be (or how large would the value of the non-monetized costs need to be) before the rule would yield zero net benefits?
- For low-probability, high-consequence rules, the risk level is sometimes difficult to quantify
  - For example, for security-related rules, the probability of a terrorist attack is difficult to determine and, thus, a break even analysis may be appropriate

Steps: Benefit-Cost Analysis

Step 9: Characterize uncertainty in benefits, costs and net benefits (for rules that exceed $1 billion in benefits or costs)

- Specify potential scenarios
- Calculate the benefits and costs associated with each scenario – sensitivity analysis across differing assumptions
- Construct a range of values
- Assign probabilities and calculate economic value to projected outcomes

What is "RIA Light" and How to Use It

- Allows for a tailored system to the requirements of the country.
- Requires five basic criteria that are needed in sequential order:
  1. Political commitment to establish and operate an effective and self-sustaining RIA process
  2. Unit or group of regulatory reformers – preferably based in a central agenda of government
  3. Clear and consistently applied criteria and rules to screen regulatory proposals
  4. Transparent policy development process that includes consultation with stakeholders
  5. Capacity building programs involving preparation of guidelines; training of officials preparing RIA and facilitating the required cultural changes and establishing monitoring, evaluation and reporting systems

References

- OMB Circular A-4, “Regulatory Analysis,” https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/
- OMB Circular A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities,” https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/revised_circular_a-119_as_of_1_22.pdf
- World Bank, “Making it Work: ‘RIA Light’ for Developing Countries: http://regulatoryreform.com/wp-content/uploads/2015/02/World-Bank-RIALightNov2009.pdf