Cost Benefit Analysis of Tax Regulations: The Marginal Revenue Rule

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The MOA

• Subjects certain tax regulations to Executive Order 12866.
• If the regulation has *annual non-revenue effect* on the economy of $100 million or more, measured against a no-action baseline, Treasury must quantify the costs and benefits.

• 12866(1)(a)(6):

  Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.
The Challenge: transfers v. real resources

• Circular A-4:
  • CBA is an estimate of the change in real resources.
    “Benefit and cost estimates should reflect real resource use.”
  • Transfers do not change real resources, so they are not included in CBA.
  • Taxes are transfers.
  • Ergo . . .

• But changes to tax rules can change real resources.
  • E.g., they change work effort.
The Challenge: distribution and revenue

• Non-tax regulations primarily seek to correct market failures.
  • Raising revenue is secondary and usually not relevant at all.
  • Distributional issues are secondary because the tax/transfer system is the primary
distributional tool.

• Tax regulations usually do not seek to correct market failures.
• Revenue and distribution are central.

• Standard tools of cost-benefit analysis developed for non-tax regulations.
Our approach

• The Marginal Revenue Rule is an estimate of the change in real resources due to a regulation.

• Separately state the distributional effects.
  • A-4 requires this.

• Separately state the revenue effects.
The MRR: the change in real resources

• Extension of the “elasticity of taxable income” concept from economics.

• Large literature. Papers include:
  
  • Feldstein (1995)
  • Feldstein (1999)
  • Chetty (2009)
  • Keen and Slemrod (2017)
Example

• Individual can decide how many hours to work.
• Earns $100/hour for each hour.
• Subject to a 30% tax.
• Each hour, the individual keeps $70 after taxes.

• Works just enough hours so the cost of one more hour, in terms of reduced free time, is $70.

• Individual is indifferent between one more, or one less, hour of work.
• E.g., works one more hour: gets $70 in after-tax wages but gives up an hour of free time worth $70.
Example cont.

• Suppose there is a change in a tax rule that causes the individual to work one additional hour.

• The individual is indifferent.

• But the government gets $30 more in tax revenue.

• The change in the rule increases total resources by $30.

• The $30 is *not* just a transfer.
Example cont.

- Same if the regulation causes one less hour of work.

- Individual is indifferent but revenues go down by $30.

- Society has $30 fewer total resources.
Compliance and administrative costs

• If the individual must keep records or incur other compliance costs, this is a cost.

• Or if the regulation reduces compliance costs, this is a net benefit.

• Same for the costs of tax administration incurred by the government.
The MRR

• Change in total resources from a change in the tax law is:

  The change in tax revenue due to behavioral or reporting changes
  minus
  The change in compliance and administrative costs
  (plus any net benefit or cost under standard CBA).
Scope

- Applies to all choices where the taxpayer can optimize.
  - Formal v. informal sector.
  - Taxable v. non-taxable compensation.
  - Reporting v. not reporting income.
  - Lower-taxed investments (e.g., tax-exempt bonds)
  - Sheltering.
  - Shifting across tax bases (e.g., from individual to corporate base).

- Extends to discrete choices as long as there are enough taxpayers.

- Non-marginal changes: provides rough estimate (can show it provides an upper or lower bound)
Transfers

• Same example but now assume there are many taxpayers.

• Some will work one more hour. They pay $30 more in tax but are not worse off.

• Others may not change their work effort but have to pay more or pay less tax.
  • They are worse (or better) off.

• But the government is better (or worse) off.

• These transfers do not change total resources. Not part of the MRR.
Transfers cont.

- Change in tax revenue is important for tax regulations.
- Central goal of the tax system is to fund government.
- Transfers are part of change in tax revenue.

- People will have very different views about the value of money in the hands of individuals versus the government.
- But this is distinct from views about whether a regulation increases total resources.

- Separately state revenue effects.
Distribution

• Who pays matters.

• Important goal of the tax system is to distribute the burden of funding the government in a fair manner.

• Two options:
  • Weight costs and benefits by who pays.
  • Do not weight but separately state distributional effects.
Separate statement of distributional effects

• Provides more information.
• Provides the information in a clearer fashion.
• Do not weight costs and benefits for distributional effects.

This is the current approach in Circular A-4.

“Your regulatory analysis should provide a separate description of distributional effects (i.e., how both benefits and costs are distributed among sub-populations of particular concern) so that decision makers can properly consider them along with the effects on economic efficiency.”
Summary

Treasury should supply three pieces of information:

1. The change in total resources from a regulation, using the MRR.
2. The revenue effects.
3. The distributional effects.

Each is important.
Also important not to confound them.