# Cost Benefit Analysis of Tax Regulations: The Marginal Revenue Rule

David Weisbach, Daniel Hemel, Jennifer Nou

The University of Chicago Law School



- 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.



• 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 subpopulations of particular concern) so that decision makers can properly consider them along with the effects on economic efficiency."



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.