

Subject: Public finance

Course code: ECON4009

Topic: **COST BENEFIT ANALYSIS**

M.A. Economics (2nd Semester)

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History of CBA

- ❖ Cost Benefit Analysis can be traced back to the 19th century by a French engineer & economist Jules Dupuit.



- ❖ In 1936, it is a simple way of weighing up project costs and benefits, to determine whether to go ahead with a project or not.

What is Cost Benefit Analysis?

- ❖ **Cost benefit Analysis** is Analysis undertaken to judge any project or investment whether government or private and find out its worth and facilitate its comparison with other available opportunities of investment.
- ❖ In other words we can say CBA finds out the worth of an investment by ranking optional investment.
- ❖ Before taking up an investment one must judge its cost and benefits. It can be adopted at Macro and Micro level.

What is Cost Benefit Analysis?

- ❖ CBA is an analytical tool used to assess the benefits and costs of regulatory proposals
- ❖ CBA has been established primarily as a tool for use by governments in making their social and economic decisions.
- ❖ Given sufficient information, CBA can:
 - ❖ calculate the net benefits for each proposal
 - ❖ rank proposals by their net benefits
 - ❖ recommend the proposal with the greatest net benefit

What is Cost Benefit Analysis..???

- ❖ A cost benefit analysis is done to determine how well, or how poorly, a planned action will turn out.
- ❖ The analysis relies on the addition of positive factors and the subtraction of negative ones to determine a net result.
- ❖ CBA measures costs and benefits to the community of adopting a particular course of action e.g. Constructing a dam, by-pass etc.
- ❖ When investment made commensurate with the benefit derived, it can be said that operation is positive and viable; but when benefits derived do not compensate financial investments made, it can be said that it is financially nonviable and negative.

Why is CBA useful?

- ❖ **CBA examines costs and benefits from the perspective of the community as a whole:**
 - ❖ it forces a wider view on decision makers
 - ❖ promotes comparability and encourages consistent decision making
 - ❖ its aim is to maximize community net benefits
- ❖ CBA includes all costs and benefits – it tells the whole story.
- ❖ **Cost Benefit Analysis is used to determine:**
 - ❖ whether a solution/project is economically feasible
 - ❖ which of two or more projects provides the best return on investment

Why is CBA useful?

- ❖ CBA provides a summary of the efficiency effects of a policy
- ❖ But CBA can draw attention to equity issues
 - ❖ by identifying who gains and who loses from a regulatory proposal
 - ❖ but it is up to decision makers to decide whether distributional impacts/equity issues are important and need addressing
- ❖ **Other issues :**
 - ❖ Is the project worthwhile financially?
 - ❖ Is it the best option?
 - ❖ Should it be undertaken at all?

Principles of CBA

- ❖ There must a common unit of measurement.
 - ❖ CBA valuations should represents producers or consumers.
 - ❖ Benefit are usually measured by market choices.
 - ❖ Gross benefit of an increase in consumption is an area under the demand curve.
- ❖ Some measurement of benefits require the valuation of human life.

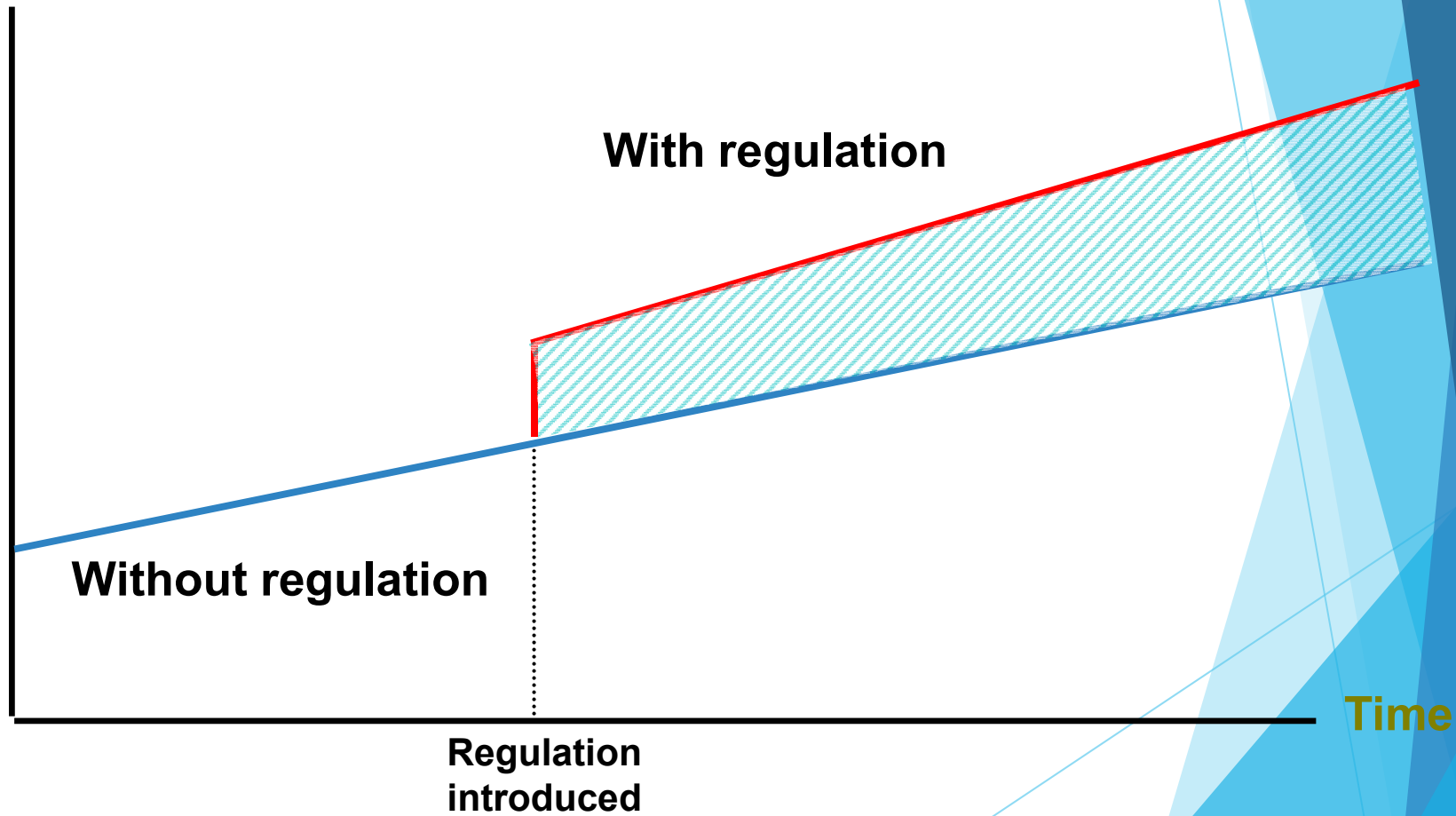
How applicable

1. Specify the set of policy options
2. Decide whose costs and benefits count
3. Catalogue the impacts and select measurement indicators
4. Predict the impacts over the life of the regulatory proposal
5. Monetise (attach dollar values to) impacts
6. Discount future costs and benefits to obtain present values
7. Compute the net present value for each policy option
8. Perform sensitivity analysis
9. Rank the policy options

Cost vs Benefit:



Net benefits



Problems Associated with CBA

❖ Measurement Problems

- ❖ Difficulties encounter in measuring intangible costs such as foul atmosphere or intangible benefits such as a peaceful neighbourhood.
- ❖ Assuming several other costs & benefits associated with the activities; and estimating the costs and benefits involves.
- ❖ Affects by Market condition, state of economy etc.
- ❖ Uneven distribution of benefit to the community.

❖ Time Problems

- ❖ Tackling future time problems by discounting future costs and benefits.
- ❖ Or calculating the correct rate for future rupees value as well as accounting for additional benefits and costs associated.

Key messages of CBA

- ❖ CBA is a pragmatic tool for drawing attention to the likely impacts of regulation.
- ❖ Quantifying costs and benefits is challenging but not impossible (given sufficient time, skill and resources).
- ❖ CBA can play an important role in improving the quality of regulatory proposals even when valuation is difficult.
- ❖ It gives planners a method to try and “put all relevant costs and benefits on a common temporal footing” in order to help people make informed decisions.
- ❖ It provides people with an understanding as to the economic costs of decisions, and allows arguments to be made for or against a change based upon economic considerations.
- ❖ It is a decision-making process that forces the decision maker to compare all direct and indirect positive and negative effects of the proposed decision on an objective basis.

Thank You

