5IE475
Policy Evaluation and Cost-Benefit Analysis

LECTURE 1
Introduction to Policy Evaluation

Klára Kalíšková
Purpose of this course

- Understand why policy evaluation is important
- Learn how to interpret and use results of evaluation studies
- Learn how to conduct policy evaluation, i.e.:
  - how to quantify costs and benefits of government programs
  - how to evaluate policies ex-ante via randomized control trials
  - how to identify causal effects of policies ex-post using observational data
Basic information

• Lecturer:
  – Klara Kaliskova (klara.kaliskova@vse.cz)

• Teaching assistants:
  – Lucie Zapletalova (lucienecasova@seznam.cz)
  – Olga Bychkova (olga.bychkova@cerge-ei.cz)

• Lectures:
  – Thu 9:15-10:45

• Exercise sessions:
  – Fri 9:15-10:45, Fri 11:00-12:30

• Office hours:
  • Fri 10:00-11:30 (NB 362)

• Course materials:
  • http://home.cerge-ei.cz/kaliskova/teaching.php
  • lecture slides, readings, information
Course requirements

• Midterm exam (20%)
• Final exam (40%)
• Critical presentation of a chosen paper (10%)
  – in groups of 4
  – at exercise sessions
• Term paper (30%)
  – in groups of 4
  – choose a specific policy, evaluate its impacts, write a short evaluation study
  – presentation of your paper-in-progress on the last two exercise sessions
• Active participation at lectures (up to extra 10%)
1. Institutional setting and motivation for policy evaluation

2. Cost-benefit analysis

3. Impact evaluation tools
   - Randomized control trials
   - Difference-in-differences method
   - Instrumental variables
   - Regression discontinuity

4. Qualitative evaluation
Literature

• Required readings:

• Recommended readings:
  – Articles assigned to each topic
Lecture 1

• Introduction to policy evaluation
  – Why we need policy evaluations
  – Example of policies to evaluate

• Regulatory Impact Assessment (RIA) process
  – What it is
  – How it differs across countries
  – RIA in the Czech Republic
INTRODUCTION TO POLICY EVALUATION
Why we need policy evaluation?

• Increasing share of resources is spent through governmental programs
• Do these programs fulfill their goal?
• Is it an efficient way of spending money?
• How do we decide where to spend the money?
Expansion in government spending in the 20th century

Source: http://www.theburningplatform.com/tag/sat-scores/
Government spending by its function, 2013

Source: Eurostat, General government expenditure (as a percentage of GDP) by function: [http://ec.europa.eu/eurostat/data/database](http://ec.europa.eu/eurostat/data/database)
Policy evaluation: Purpose

• To answer questions such as:
  – Did the policy meet its objectives?
  – Did it have an impact?
  – What was the size of the impact?
  – What was the cost-benefit ratio of the program?
  – Who benefited and who did not?
  – Should the program continue, expand, or be replicated elsewhere?
Policy evaluation: FAQ

• Why we need to evaluate public policies?
  – Can’t we just choose to spend money on reasonable programs?
• Can we evaluate policies ex-ante (before they are introduced)?
• Why are we interested in ex-post (after the policy is already in force) evaluation?
• Do we need some specific knowledge to evaluate policies?
  – Cannot we just look at the outcome we are interested in and see if it increased/decreased after the policy was introduced?
Policy evaluation: Examples (1)

• Active labor market policies:
  – Policy: Governments invest into activation policies to the unemployed: (re)training courses, employment subsidies, public employment services
  – Idea: These policies should help unemployed find job faster and/or find a better job
  – Policy evaluation questions:
    • Do the unemployed indeed find (better) job faster after they participate in these programs?
    • What is the impact of a training course on unemployment duration and subsequent wages?
    • Is this money efficiently spent? Can we use money elsewhere to help unemployed more?
Policy evaluation: Examples (2)

• Education:
  – Policy: Government subsidizes purchases of tablets for schools
  – Idea: Usage of tablets in class helps children learn more efficiently, improves their motivation to study, ...
  – Policy evaluation questions:
    • Is this money efficiently spent? What is the cost-benefit ratio of such a program?
    • What is the impact of using a tablet in class on children’s school performance?
    • Do children perform better in tests (are more successful at future work) if they can use a tablet in class?
Policy evaluation: Examples (3)

• Health care:
  – Policy: Government introduces regulatory fees (co-payments) for general practitioner visits
  – Idea: Introduction of fees decreases overuse of health services
  – Policy evaluation questions:
    • Do fees indeed decrease usage of health care? Is the decrease indeed driven by those who did not need care (were overusing it)?
    • What is the impact of regulatory fees on health of the population?
    • What is the cost-benefit ratio of such a program?
Policy evaluation: Evaluation methods

1. Cost-benefit analysis
   – Comparison of (expected) costs and benefits of a policy

2. Methods evaluating impact of a policy
   – Impacts are changes in any measurable outcomes caused by the policy
   – Impact of policy/program = *the difference between outcomes with the policy and without it*
   – Measure this difference in a way that can attribute the difference to the policy, and only the policy
1. Cost-benefit analysis

• Covered in the first part of this course
• Calculating costs and benefits of policies
• Example:
  – A proposal to increase police force by 1000 policemen
  – What are the costs and benefits of such a policy?

• Costs: calculate what are the hiring costs, costs of salaries and safety equipment for the newly hired policemen, …

• Benefits: calculate what are the costs of crimes that are avoided (value of lives saved, value of things that are not stolen, …)
2. Impact evaluation

• Covered in the second part of this course
• Measuring the impacts of policy on any potential outcome of interest
• Example:
  – A proposal to increase police force by 1000 policemen
  – What is the impact of the newly hired policemen on crime rate?
    • We want to know by how much the crime rate decreased due to this policy (ex-post impact evaluation)
    • Suppose we observe the crime rate indeed decreased after the policemen were hired -> Does it mean that the policy worked?
REGULATORY IMPACT ASSESSMENT
Regulatory Impact Assessment (RIA)

- Evidence-based policy making: Is this regulation the best available mean to address the policy objective?
- RIA = policy tool and decision process to examine and measure the likely benefits, costs and effects of a new regulation
- Aim:
  - Provide evaluation of a policy impact before the policy is implemented
  - Analysis of expected costs and benefits of a policy and its alternatives
- It should clearly state the policy objective and assess various means to achieve this objective
- Used in many countries, but differs in methods, scope, and influence on policy making
RIA process

• Basic structure of the RIA process:
  – Definition of the policy objective/problem to be addressed
  – Evaluation of various solution mechanisms (e.g. do nothing, implement new regulation, increase funds in the existing regulation)
  – Consultations with stakeholders
  – Estimate economic, social and environmental costs of each proposed solution
  – Justification of a selected solution
RIA adoption in OECD countries

Differences in the RIA processes across countries

RIA in the Czech Republic

• It is part of the legislative process since 2007
• Its main aim is to:
  – Improve policy making process
  – Increase transparency of the policy making process
  – Increase awareness about the policy making among stakeholders and academics through consultations
• Serves as a justification for the policy proposals, but also as an input in the policy making process
• In 2011, new committee of independent experts for RIA was established as an “independent watchdog” to assess the quality of RIA reports
RIA in the Czech Republic

• What can be improved?
  – Independent committee of experts found that most RIA reports do not include appropriate empirical analysis of the policy impacts
  – Need to establish a culture of evidence-based policy
    ➢ Policy which is informed by rigorous evidence
  – Learn from best practice RIA in other countries
  – Overcome the resistance of public servants towards RIA
Summary (1)

• Increasing amount of resources is spent through public policy
• We should know if this money is spent efficiently
  – Do the benefits of the program exceed costs?
  – Is this program the most efficient way to achieve the policy goal?
  – Is there an alternative way to spend the money that would be more beneficial to the society?
• In this course, we will learn how to answer these questions.
Summary (2)

• Evaluation methods:
  1. Cost-benefit analysis
     • Evaluating (expected) costs and benefits of a policy
  2. Methods evaluating impact of a policy (Impact evaluation)
     • What are the impacts of a policy on the expected outcome (goal)?
     • Impact of policy = the difference between outcomes with the policy and without it
Summary (3)

• Evidence-based policy making:
  – Is this regulation the best available mean to address the policy objective?

• In the existing policy making process, there is a tool used to assess impacts of proposed policies -> RIA

• However, RIA processes differ greatly across countries in their quality, methods, scope, and impacts on decision making process

• The RIA in the Czech Republic still scarcely uses appropriate empirical analysis to assess policy impacts