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Economic Policy Research Foundation of Turkey

Policy Evaluation Methodologies and Success Factors

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Outline

- ■ What is "evaluation" and why do we care?
    - ✓ Ex-ante evaluation
    - ✓ Ex-post evaluation
- ■ Methodologies
- ■ Success Factors
- ■ Relation to "Industrial Policy" and work by TEPAV

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What is evaluation?

- Evaluations are periodic, objective assessments of a planned, ongoing or completed project, program or policy.

- They are used to answer specific questions related to design, implementation and results.

- Development programs are designed to change outcomes and hence monitoring and evaluation are at the heart of evidence-based policy making

Dani Rodrik:

"what we need to do is to design institutions that at least give the governments the capacity to let go of the losers. That's a much less demanding requirement on the system than simply presuming that the government can pick winners because it allows that governments will make mistakes.

In fact, from this perspective, making zero mistakes is surely sub-optimal"

Source: http://www.sss.ias.edu/files/pdfs/Rodrik/Commentary/interview-Prof_Dani_Rodrik.pdf

Evaluation: Why is it important?

- Development policies and programs aim at achieving certain goals under limited budgets

- Although the public resources are scarce, distortions that block economic activity are almost everywhere

- It is important to identify which constraints bind most for boosting growth

- More important to identify what type of policies work best, why and when

- Rodrik: It is the governance of industrial policy that matters most

- Evaluation based on evidence is the key to this aim
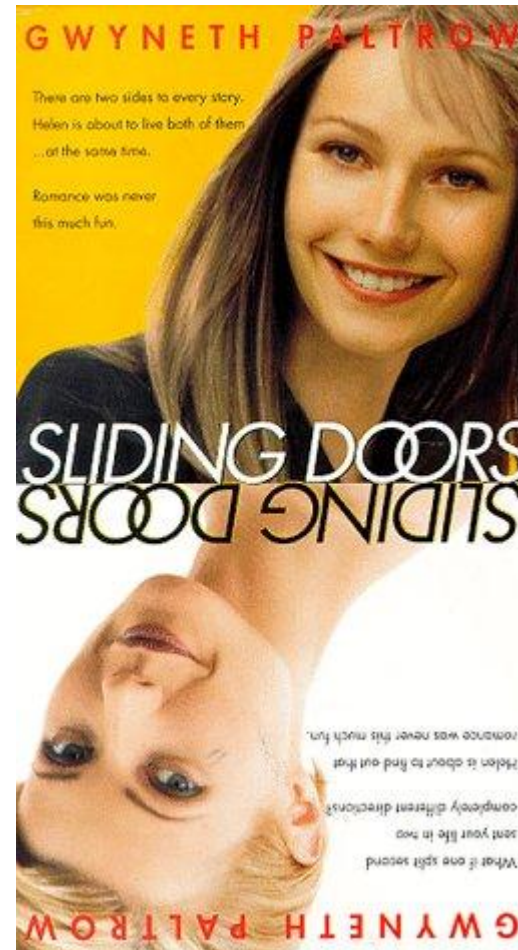
Evaluation:

- Ex-ante evaluation:
  - ✓ On identifying needs, strategies and objectives
  - ✓ Relevant for pre-accession economies for fostering private sector development
- Ex-post evaluation:
  - ✓ On identifying "causal impact"

Evaluation: Objectives and Design

- Lesson Learning
  - Beneficiaries
  - Program
  - Organization
- Accountability
- Sustainability
- Improved Resource Allocation

- A good evaluation consist of clear answers to questions as:
  - Who is the target?
  - What are the needs?
  - What does the program aim to achieve?
  - What is precisely being evaluated?

Impact evaluation is mostly about identifying the change as compared to the counterfactual:
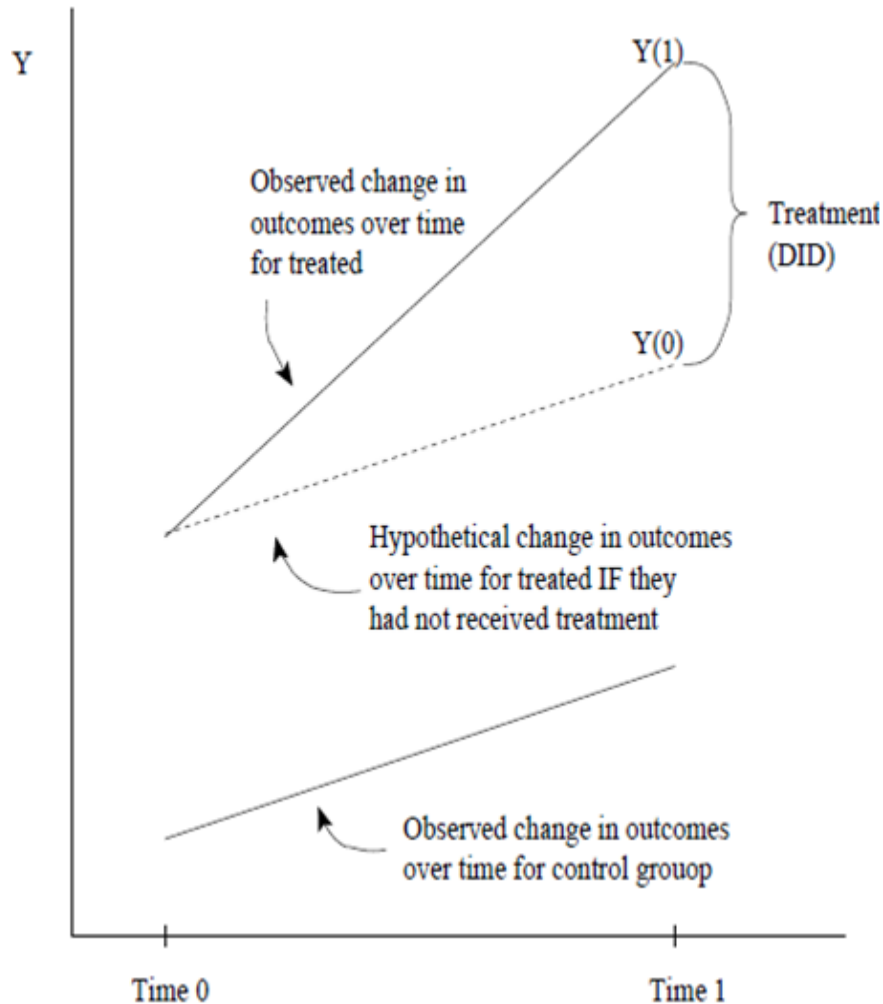
What is counterfactual?

Evaluation:

- Attribution and causal inference are the defining pillars of policy evaluation:

- **Counterfactual:** What would have happened in the absence of the program?

- **Impact**=What happened with the program? as opposed to, what would have been in the absence of the program?

- The main challenge for policy makers is establishing causality as the information on counterfactual is almost always missing

Constructing the counterfactual:

- Constructed by selecting a group not affected by the program

- Randomized assignment: creating a control group that is not affected by the program

- Non-randomized assignment: hypothesize that a certain group mimics the counter-factual

Methodologies in Policy Evaluation:

- Experimental Design:
    - Randomized experiments (state of the art)
- Quasi-experimental:
    - Instrumental variables
    - Regression discontinuity design
- Non-experimental:
    - Difference in differences
    - Propensity-Score Matching

The ideal world as opposed to what we get in reality:

- Evaluation based on experiments make it possible to vary one factor at a time and therefore provide "internally" valid estimates of the causal effect (Banerjee & Duflo-2009)

- However, randomization is rarely possible with macro policies—such as industrial, trade, monetary, and fiscal policies

- Economic development has been typically due to economy-wide policy reforms rather than the small-scale randomized interventions in health or education (Rodrik 2008)
  - China and India example

Evaluations work best when:

- Being able to determine key questions for the organization and policy change

- Data is available at the most micro level as possible

- Information is available on intervention groups before and after the policy intervention and that groups have similar initial time trends

- Even if pre-trends are the same one still has to worry and be informed about other policies changing at the same time

- When institutional capacity for evaluation is present

Relevance for industrial policy: Our work as TEPAV

EX-ANTE EVALUATION:
Economic Assessment of the REACH Regulation on the Chemicals Industry of Turkey (ERCIT)

- REACH defines registration, evaluation, authorization, restriction procedures of chemical substances produced and imported to EU
- The aim of the project:
  - ✓ carry out an economic impact assessment of REACH regulation to analyze the structure of the chemicals industry
  - ✓ develop compliance strategies for the firms
- Why was it important to assess the impact of REACH on Turkey?
  - ✓ EU is an important trading partner of Turkey
  - ✓ Exports and the production of chemicals industry had a strong growth trend
  - ✓ Chemical inputs intensively used in the production of the main manufacturing sectors (textiles, clothing, minerals, plastics, automotive)

Relevance for industrial policy:

The evaluation completed under REACH:

- Identification of supply-chain relationships and relevant actors

- An extensive survey conducted to collect data

- Estimation of direct and indirect costs

- Completed an economic impact assessment

  - ✓ How will REACH effect different firms as defined under Directive?

  - ✓ How will different prototypes react?

  - ✓ Developing different cost-effective compliance strategies for each prototype according to their production cost and financial structure

  - ✓ How will the production be affected?

  - ✓ How will the exports to EU be affected?

  - ✓ A roadmap to help firms decide whether to incur registration costs

Relevance for industrial policy:

Impact evaluation of different incentives on that aim to promote employment in Turkey:

1. Regional Incentives

2. Female and youth employment incentives

3. Incentives to hire the registered umployed

4. Incentives that reward regular payment of contributions

5. Investment incentives

6. R&D incentives

7. Cultural products investment incentives

8. Incentives to promote disabled labour force

Those incentives matter a lot for industrial policy because they significantly reduce the labour cost to employers

How to disentangale and evaluate the impact of different schemes?

Challenges:

- None of them are randomized experiments

- Scope of the incentive law changed more than once over time

- Possibility of reverse causality and selection bias

- Firms might be subject to multiple schemes

- Firm level data not accesible

- Some incentives bring additional benefits such as land and tax breaks

Conclusion: understanding what works is crucial because:

- Substantial public resources are invested

- Although faced with enormous limitations, insights from evaluation can and should guide policy-making

- No other credible way to identify success and failure and draw lessons

- Key to identify <u>contextual nature of policy solutions</u> as opposed to one-size-fits-all approach

- More and better impact evaluations will help strengthen <u>the evidence and governance</u> for development policies and programs

Nobel Laurate
Amartya Sen:
"Development is a state of mind"