

Introduction to Economic Policy Analysis

Introduction to Economic Policy Analysis

(A concise guide for students and practitioners)

1. What Is Economic Policy Analysis?

Aspect	Description
Definition	Systematic examination of government actions (taxes, subsidies, regulations, public spending, etc.) to assess their economic effects.
Purpose	- Identify intended and unintended outcomes. - Provide evidence-based recommendations. - Help policymakers allocate scarce resources efficiently.
Scope	Micro-level (households, firms) ? Macro-level (national income, inflation, employment).
Key Users	Government agencies, legislators, international organizations, NGOs, think-tanks, private sector analysts.

2. Core Concepts & Terminology

Term	Meaning	Typical Application
Efficiency	Maximizing total welfare given resources.	Cost-benefit analysis, Pareto improvements.
Equity	Fair distribution of benefits and burdens.	Progressive taxation, targeted transfers.
Externalities	Spill-over effects not captured by market prices.	Pollution taxes, subsidies for R&D.
Deadweight Loss	Welfare loss from market distortions.	Evaluating tariffs, price controls.
Marginal Analysis	Compare incremental benefits vs. incremental costs.	Setting optimal tax rates, subsidy levels.
Fiscal Multipliers	Change in GDP from a change in government spending/taxation.	Stimulus-package design.

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Policy Instruments	Tools used to achieve objectives (taxes, subsidies, regulation, public provision).	Designing carbon pricing schemes.

3. Analytical Frameworks

3.1. Cost-Benefit Analysis (CBA)

1. **Identify** all relevant costs and benefits (direct, indirect, intangible).
2. **Quantify** in monetary terms (use market values, shadow prices, willingness-to-pay).
3. **Discount** future streams to present value (choose appropriate discount rate).
4. **Calculate** Net Present Value ($NPV = PV(\text{Benefits}) - PV(\text{Costs})$).
5. **Decision Rule:** Adopt if $NPV \geq 0$ (or Benefit-Cost Ratio ≥ 1).

3.2. Distributional Analysis

- Uses household survey data or microsimulation models.
- Examines how policy changes affect income/consumption across quintiles, regions, or demographic groups.

3.3. General Equilibrium Modeling

- **Computable General Equilibrium (CGE)** models capture economy-wide feedbacks (price changes, factor reallocation).
- Useful for trade policy, tax reform, climate policy.

3.4. Econometric Impact Evaluation

Technique	When to Use	Key Feature
Difference-in-Differences (DiD)	Policy introduced in some regions but not others.	Controls for common trends.
Regression Discontinuity (RD)	Sharp eligibility cut-offs (e.g., income threshold).	Exploits local randomization.
Instrumental Variables (IV)	Endogenous policy exposure.	Provides causal estimate.

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Technique	When to Use	Key Feature
Synthetic Control	Single treated unit with a pool of controls.	Constructs weighted counterfactual.

4. Steps in Conducting an Economic Policy Analysis

1. Problem Definition

- Clarify policy objective (e.g., reduce carbon emissions by 30%).
- Set the analytical horizon (short-run vs.