

# **Economic Analysis of Projects: Principles and Concepts**

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## *What Economic Analysis of Project Really is:*

- More than rate of return calculations
- Framework/tool to select and design good projects
  - ➔ relevant and responsive (Economic Rationale)
  - ➔ feasible, result-delivering - contributing to welfare of country and its people (Project Economic Analysis)

# *Differences between Economic & Financial Analyses:*

## Financial

## Economic

Perspective	Project entity or participants	Economy-wide, all members of society
Benefits and Costs	Financial flows	Non-market values, Opportunity costs



For a project to be economically viable, it must be financially sustainable

# *Selected Steps in Project Economic Analysis*

1. Macro Context
2. Sector Analysis
3. Rationale for Public Sector Involvement
4. Choice of Modality
5. Demand Analysis
6. Alternative Analysis and Least Cost
7. Valuation of Benefits & Costs
8. Financial & Institutional Sustainability
9. Distribution Analysis
10. Sensitivity Analysis
11. Monitoring & Evaluation

Validating the Economic Rationale

PROJECT Economic Analysis

# *Macroeconomic Context*

A project cannot be designed in isolation from the rest of the economy.

- project must be relevant vis-à-vis country and ADB objectives
  - link to country broader development objectives
  - link to CSP
- country's resource position must be carefully assessed
- macroeconomic factors may affect project performance
  - identify factors most likely to influence target sector
  - economic outlook

# *Sector Analysis*

*What are key problems and issues that need to be addressed?*

- policy and regulatory environment
- who supplies & what constraint do they face
- financing: who pays for the good or service
- role of public versus private sector



identify possible areas for investment and policy reform

# *Public Sector Rationale and Choice of Modality*

*Why should there be public sector intervention?*

- Market or institutional failures
- Public good
- Equity issue
- What is counterfactual if government is not involved?

*What Modality is the most appropriate?*

# Demand Analysis

*How much of the output is wanted? How much are users willing to pay for it?*

- Project design should be demand-driven
- Assess demand for product or service
- Identify demand shifting factors
- Project growth rate of demand, influence of demand shifters (size of project)



basis for identification of project size, timing and overall benefits



# *Alternative and Least Cost Analysis*

*What is the most efficient way of addressing the problem at hand?*

- Evaluate alternative project design in terms of lending modalities, financial arrangements, scale and timing, location, etc.
- Explain why proposed alternative chosen (least cost alternative)

## *Valuation of Benefits & Costs*

- Assess what will happen w/o project (counterfactual)
- Identify project benefits & costs
- Value project benefits & costs
- Economic viability: Benefits > Costs
- Cost effectiveness analysis if benefits cannot be valued

# *Financial and Institutional Sustainability*

*Are there enough resources to ensure flow of benefits?*

- Assess financial performance of project entity for revenue generating projects
- Assess self-financing capacity of project entity
- Fiscal impact (implicit or explicit subsidy)
- Sources of funds to meet net financial requirements
- Institutional capacity assessment

# *Distribution Analysis*

*Who benefits and by how much?*

- Identify groups that gain or lose
- Assess size of gains and losses
- Target groups (poor, women, etc.)



shed light on likely impact of project,  
sustainability

# *Sensitivity and Risk Analysis*

*What are the chances that benefits & costs will be realized as anticipated?*

- Identify variables to which project is sensitive
- Assess change in parameters required to change project decision
- Assess likelihood of these changes occurring
- Consider mitigating actions against main sources of uncertainty

# ***Monitoring & Evaluation***

*Do initial assumptions maintain validity throughout project life?*

- Identify key variables necessary to measure project outcome/impact
- Establish system to collect data on all key variables

## *Overall Assessment*

- Is project relevant in country/sector context?
- Has rationale for public sector intervention been clearly established?
- Does project incorporate best alternative design?
- Is project economically sound?
- Is project feasible/sustainable?

# Key Areas of Analysis in ADB's Project Processing Cycle

Step	A. Country Strategy and Programming	B. TA Fact-Finding	C. TA Implementation	D. Loan Fact-Finding	E. MRM, SRC
Activity	1. Macroeconomic context assessment 2. Sector context assessment 3. Demand Analysis 4. Identification of economic rationale and operation prospective	1, 2, 3. Update of macroeconomic, sector context, demand analyses  4. Confirmation of economic rationale  5. Identification of project alternatives  6. Preliminary identification of benefits and costs, and distributional issues  7. Identify fiscal and financial sustainability issues	2, 3. Sector and project demand analysis  5. Confirmation of the optimal project alternative  6. Full identification of costs and benefits, including methods of measuring benefits and costs  1-7. Expectations/overall assessment of the proposed project investment	1-5. Overall Assessment of developing project investment  6. Validation of cost-benefit analysis  7. Financial and institutional sustainability analysis  8. Distribution analysis  9. Sensitivity and risk analysis  10. PPMS	1-10. Full confirmation of the project's economic viability and resolution of outstanding economic issues
Output	CSP/Project Concept Paper	TA Paper	Interim/Draft Final Reports	Draft RRP with Supplementary Appendixes	RRP