Economics Training Series
Introductory Course

From Financial Analysis to Economic Analysis

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Differences between Economic & Financial Analyses:

	Financial	Economic
Perspective	Project entity or participants	Economy-wide, all members of society
Benefits and Costs	Financial flows	Shadow Prices

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Why Economic & Financial Analyses Differ: Examples

- Different Perspectives (Project Entity vs. Society): Light House, Pollution, Child Education, Car Alarm System

  ⇒ Consider different things...

- Different Valuation (Financial Values vs. Shadow Prices): Education, Car

  ⇒ Value things differently...

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Why Economic & Financial Analyses Differ: Examples

- Different Perspectives (Project Entity vs. Society): Light House, Pollution, Child Education, Car Alarm System
- Different Valuation (Financial Values vs. Shadow Prices): Cigarette

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Financial and Economic Prices

Initially, project costs and many outputs are valued in financial terms.

For economic analysis, financial prices of costs and benefits must be ***adjusted*** to allow for effects of

- government intervention (taxes, subsidies, controls, quotas, etc.)
- market structure (monopolies, imperfect competition)
- opportunity costs of resource use

Adjusted prices = 'economic' or 'shadow' prices

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Economic Analysis

- Requires clear definition of project boundary - which costs/benefits to include?
- Facilities already in existence treated as sunk costs and excluded from economic analysis
- Exclude transfer payments (taxes, duties, subsidies)
- Negative externalities are economic costs and should be internalized (pollution control, mitigation measures)

Externalities: Examples of Project Environmental Impact

	On-site Impacts	Off-site Impacts
1	Crop production increments	Chemical pollution in rivers flowing through plantations
2	Increased forest area	Micro and meso climate change
3	Increased tourism	Downstream solid waste pollution
4	Reduced soil erosion	Reduced downstream siltation, more regular river flow and increased hydropower generation
5	Enhanced mangrove breeding grounds for fish	Increase in fish stocks in nearby coastal waters

Taxes : Examples of Sources of Financial and Economic Price Differentials Along the Production-to-Market Chain

Stage of Production Chain	Examples of Potential Sources of Difference between Financial and Economic Prices
Input Supply	Taxes and duties on inputs (e.g., herbicides, pesticides); subsidies on inputs (e.g., fertilizers)
Primary Production (e.g., cultivation, harvesting, storage, handling)	Taxes or subsidies on agricultural and farm equipment (e.g., tractors, harvesters, silos) or materials (bags, packaging); non-market rate credits to producer
Transport to Market	Taxes or subsidies on fuels and vehicles
At market	Free physical marketing infrastructure; state marketing agency or private monopsonistic purchaser buying at fixed price
Trader/Distributor	State agency without cost-recovery; private traders trading internationally under managed foreign exchange regime
Domestic Processor	Taxes on inputs (fuel, machinery) used in processing

Pricing Project Costs and Benefits: Numeraire and Price Level

- Domestic price numeraire = all economic prices expressed at equivalent domestic market price level,
  - Adjust all items valued at border prices (e.g., traded inputs and outputs) by a factor (***SERF***) to convert to the domestic price level

OR

- World price numeraire = all economic prices expressed at equivalent world market price level
  - Adjust all items valued at domestic prices (e.g., nontraded inputs and outputs, scarce labor) by a conversion factor ***(SCF)*** to convert to the world (border) price level

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Application of Conversion Factors by Chosen Price Numeraire

Item	Using Domestic Price Numeraire	Using World Price Numeraire
Traded goods	Border price multiplied by SERF	Border price
Scarce labor	Calculated opportunity cost at domestic prices	Calculated opportunity cost at domestic prices, multiplied by SCF
Surplus labor	Calculated opportunity cost at domestic prices (SWRF)	Calculated opportunity cost at domestic prices, multiplied by SCF
Major cost items	Market price, adjusted by specific conversion factor	Market price, adjusted by specific conversion factor
Other domestic resources	Domestic market price	Domestic market price, multiplied by SCF
Net effect of applying conversions	**Adjusted domestic market prices**	**Adjusted world market prices**

Thank you.

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