Poverty Issues in Infrastructure Regulation: Choices and Dilemmas, Opportunities and Pitfalls

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Ashley C. Brown Executive Director, Harvard Electricity Policy Group John F. Kennedy School of Government Harvard University

Of Counsel, Dewey & LeBoeuf

Categories of Issues

- A. Externalities: Social and Environmental
- **B.** Network Benefits
- c. Subsidies and Cross-Subsidies
- D. Enforcement Issues

A. Externalities: Social Issues

Regulatory Focus: Inward or Outward?

- 1. Examples of Social Issues in Regulation
 - a. Poverty
 - b. Environment
 - c. Economic Development
 - d. Health and Welfare
 - e. Literacy and Education

A. Externalities: Social Issues

Regulatory Focus: Inward or Outward?

- 2. Case for Inward Focus
 - a. Limited Legal Jurisdiction
 - b. Political Nature of Social Issues vs. Non-Political Regulation
 - c. Inherent Conflict Between Economic Efficiency and Social Objectives
 - d. Breadth of Social Issues vs. Narrow Technical Expertise
 - e. Who Defines Social Issues for Regulators?

A. Externalities: Social Issues

Regulatory Focus: Inward or Outward?

3. Case for Outward Focus

- a. Social Issues Not Always Anticipatable by Policy Makers
- b. Social Issues Often Unavoidable
- c. Availability of Efficient Regulatory Remedies
- d. De-Politicization of Difficult Social Issues
- e. Obvious, Self Defined Issues (e.g. Poverty) vs. Complex Undefined Issues (e.g. Environment)
- f. Ill Defined Boundaries Between Regulatory and Social issues (e.g. Rate Design)

B. Network and Societal Benefits to Serving the Poor

Benefits of Greater Access to Network

- a. More Contribution to Fixed Costs
- b. Broader Access in Telecommunications
- c. Reduced Social Spending (e.g. Health)
- d. Environmental Protection (e.g. Protecting Aquifers, Reduced Air Pollution)
- e. Economic Development (e.g. Micro-Enterprises)

Who Decides on Subsidies: Government Policy Makers or Regulators?

- 1. Case for Government Policy Makers
 - a. More Political Accountability
 - b. Better Positioned to Balance all Considerations
 - c. Better Positioned to Deal with the Politics of Subsidies
 - d. Access to Public Treasury: Ability to Subsidize as well as Cross-Subsidize
 - e. Subsidies are Less Likely to Interfere With Efficient Pricing
 - f. Less Dependent on Monopoly Structure
 - g. Stronger Legal Authority

Who Decides on Subsidies: Government Policy Makers or Regulators?

- 2. Case for Regulators
 - a. Less Exposed to Political Interference
 - b. Better Positioned to Design, Sustain and Oversee Efficient Programs and Targeting
 - c. Better Understanding of Sector Specific Considerations
 - d. Better Understanding of Pricing Considerations
 - e. Better Understanding of Cross-Subsidization Effects
 - f. Better Understanding of Consumer Behavior

Rate Design Considerations in Cross-Subsidies

- A. Covering Variable Costs
- **B.** Contribution to Fixed Costs
- c. Avoiding Uneconomic Bypass
- D. Non-Bypassable Source of Revenue

Structural Considerations in Designing Subsidies

- 1. Consumption Based
 - a. Lower Rates for Initial Block of Consumption
 - b. More Reliance on Variable Rather than Fixed Charges

Pros and Cons of Consumption Based Approach

- + Relatively Easy to Administer
- Consistent With Traditional Approach to Tariff Design
- + Efficient Price Signal

However

- Does Not Efficiently Target Intended Beneficiaries
- Not Always Consistent with Social Objectives (e.g. health equipment)

Structural Considerations in Designing Subsidies

2. Income Based (Income Defined Eligibility Requirements)

Pros and Cons of Income Based Approach

- + Efficient Targeting
- + Transparent

However

- Inefficient Price Signal
- Complex Administration

Structural Considerations in Designing Subsidies

3. Geographically Based (e.g. Rural, or Distressed Region)

Pros and Cons of Geographically Based Approach

+ Easy to Administer	+ [Easy	to	Adm	nini	ister
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+ Transparent

However

- Highly Inefficient Targeting
- Easily Politicized

Note: On Grid and Off Grid / Renewable and Non-renewable Considerations 12

Structural Considerations in Designing Subsidies

4. Age Based (e.g. Elderly or Children in Household)

Pros and Cons

- + Easy to Administer
- + Transparent

However

- Highly Inefficient Targeting

Subsidy Conditionalities

1. Technology

2. Performance

Subsidy Conditionalities

1. <u>Technology</u>

(e.g. Pre-Paid or Real Time Meters – Combinable With Other Approaches)

Pros and Cons

- + Increases Efficiency
- + Appropriate Signals
- + Easy to Administer **However**
- Initial Expense
- Consumer Education

Subsidy Conditionalities

2. <u>Performance</u> (e.g. Energy Efficiency, Consumption Cap, Participation in Other Programs)

Pros and Cons

- + Increases Efficiency
- + Optimizes Consumer Benefit However
- Complex Administration
- Consumer Education

D. Enforcement Issues

1. Non-Technical Losses (e.g. Theft, Meter Tampering, Illegal Connections)

2. Non-Payment Issues

- Distinguishing Between Those Who Cannot Pay From Those Who Do Not Pay
- Bill Collection Policy
- Disconnection Policy