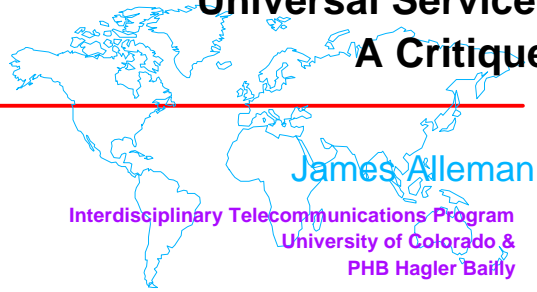


Universal Service: A Critique



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Agenda

- Goal: Universal Service
- Efficiency Concerns
- Cross-Subsidies
- Summary/Recommendations

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Policy Goal: Universal Service

Universal Service:

**Below- cost Prices for
Exchange Service**

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Policy Goal: Universal Service

- Rural/Urban Rate Parity
- Residential Subsidized
- Business > Residential Rates

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Policy Goals

- Policy Instruments
 - ▶ Pricing Goal
 - ▶ Not Policy Goals

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Policy Goals: Concerns

- Economic Efficiency
- Distributional Impact/Equity
- Externalities Addressed?
 - ▶ High Market Penetration of Exchange Service

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Policy Goals

- **Not Addressed**
 - ▶ Incidence
 - ▶ Penetration
 - ▶ Needs/Means Test
- **What are the Social Goals?**

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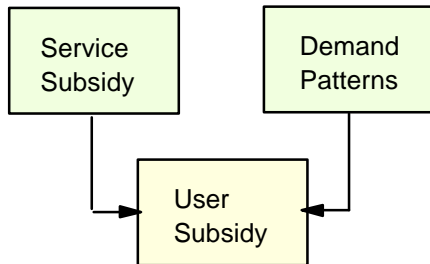
Policy Goals

Implicit Assumptions:
(but incorrect!)
Benefited Class (Poor?):

- ▶ Use Only Exchange Service
- ▶ Do Not Use toll
- ▶ Live in the rural areas
- ▶ Low exchange rates achieved high market penetration

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Incidence



Efficiency Concerns

- **Inefficient**

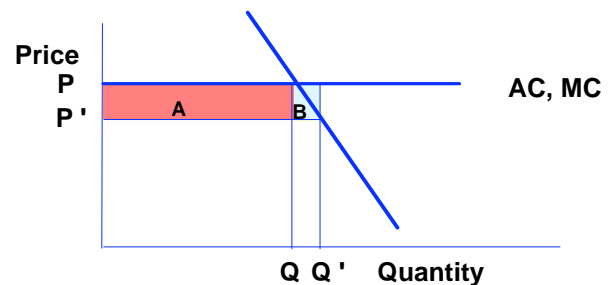
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Universal Service Obligation

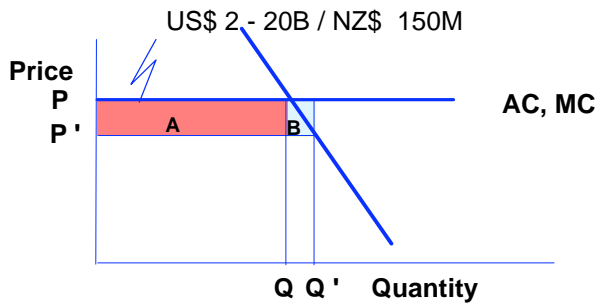
- **Inefficient**
 - ▶ Not Marginal Subscribers

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Service Subsidy



Service Subsidy



Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted

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Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted
 - ▶ If Targeted
 - Externality Addressed

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Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted
 - ▶ If Targeted
 - Externality Addressed
 - Comports with Efficient Pricing

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Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted
 - ▶ If Targeted
 - Externality Addressed
 - Comports with Efficient Pricing:
 - Closer to MC =>
 - High Access Charge &
 - Low Usage Charges

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Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted
 - ▶ Not Desired

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Universal Service Obligation

- **Inefficient**
 - ▶ Not Marginal Subscribers
 - ▶ Not Targeted
 - ▶ Not Desired
- **Demand Relationships**

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Demand Relationships

- **Subscriber Access is Derived Demand**
 - ▶ Exchange Usage
 - ▶ Toll Usage
 - ▶ Other Services

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Demand Relationships

- **Access is Derived Demand**
- **Demand Cross-elasticities**
 - Access demand has a cross-elasticity with toll demand

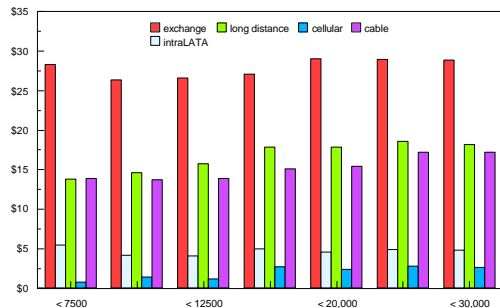
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Demand Relationships

- **Access is Derived Demand**
- **Demand Cross-elasticities**
- **Expenditures Experience**

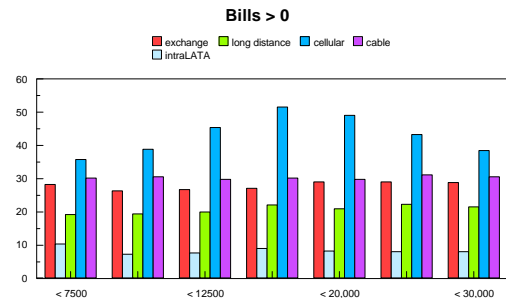
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Expenditure by Income



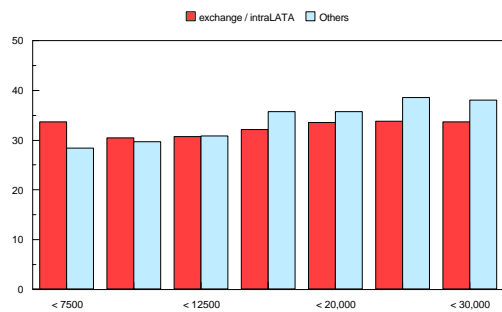
Source: PNR & Associates, Bill Harvesting, 1995
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Expenditure by Income



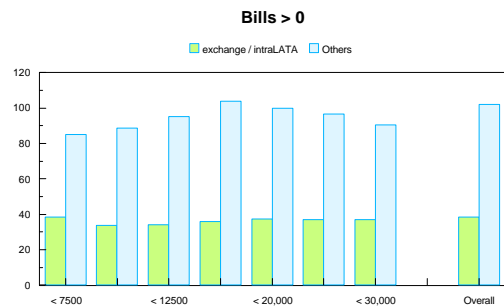
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Expenditure by Income



Source: PNR & Associates, Bill Harvesting, 1995
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Expenditure by Income



Source: PNR & Associates, Bill Harvesting, 1995
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Efficiency Concerns

- **Inefficient**
 - Not Marginal Subscribers
 - Not Targeted
 - Not Desired
- **Demand Relationships**
- **Companies Subsidized**

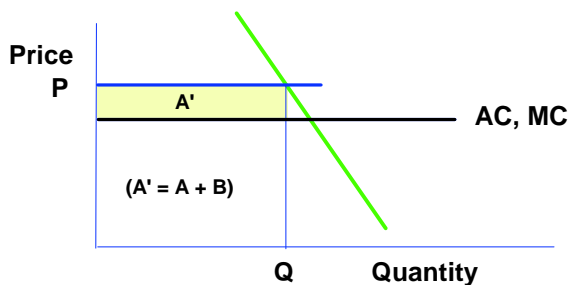
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Cross-Subsidies

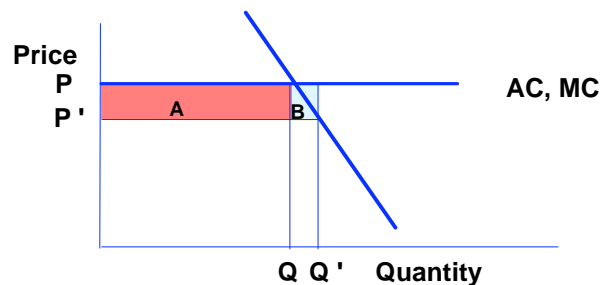
- **No Market Test**
- **Inefficient**
- **Avoids Competition**
- **Anti-Competitive**

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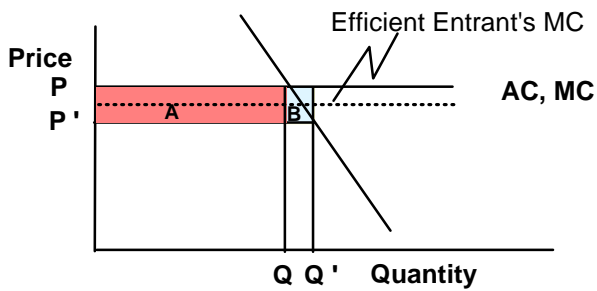
Anti-competitive



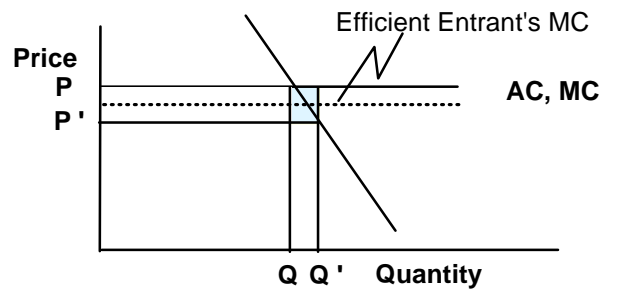
Service Subsidy



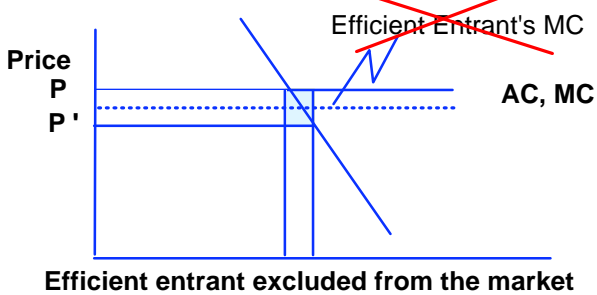
Anti-competitive



Anti-competitive



Anti-competitive



Recommendations

Subsidies

- No Cross-Subsidies
- Targeted Subsidies, if any
- Government Financed

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Summary/Recommendations

- Universal Service Inappropriate
- Social Obligation Defined
- Research on Incidence
- No Cross-Subsidies

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