

USAID Support for Telecommunications Reform

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Outline

- 1. Telecommunications & economic growth
 - Waverman: endogenous growth model
 - Jensen: survey of fish market in India
- 2. USAID instruments for telecommunications
- 3. What USAID instruments were used in El Salvador & Guatemala?
- 4. Main features of the telecommunications laws: an illustration of "best practices"
- 5. Conclusions

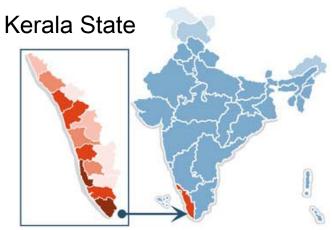


Waverman: Cell Phones in LDCs

- "Investment in telecoms generates a growth dividend because the spread of telecommunications reduces costs of interaction, expands market boundaries, and enormously expands information flows. Modern revolutions in management such as 'just-in-time' production rely completely on efficient ubiquitous communications networks."
- Endogenous growth model results:
 - Growth higher with higher mobile teledensity
 - Effect higher for lower income countries
 - With teledensity 10 percentage points higher per capita
 GDP/capita would grow 0.59 percent higher
 - Direction of causality: cell phones lead to growth

Robert Jensen: Fishermen & Cell Phones

- Mobile service began 1997- 2001
- Fishing boats & traders began using cell phones to coordinate sales
- Fish dumping eliminated (was 8% of daily catch before cells)
- Fishermen's profits increased on average by 8 percent
- Consumer price declined by 4 percent
- Primarily the largest fishermen adopted mobile phones
- Smaller fishermen without phones still gained due to the improved functioning of markets
- Not a donor project: simply the result of greater availability of cell phones





Types of USAID Assistance & Instruments

- Types of support for reform
 - Full reform of sector
 - El Salvador, Guatemala,
 - Iraq, Afghanistan
 - Fine tuning reforms
 - Colombia
 - Minor support
 - Montenegro



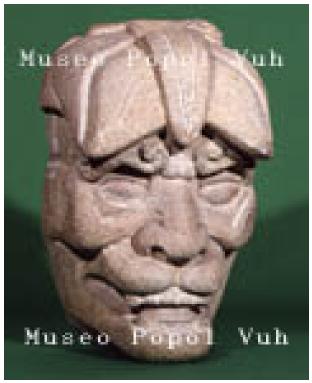
- Individual consultants: El Salvador, Guatemala, Montenegro
- USAID staff: El Salvador
- Consulting firms: Iraq, Afghanistan, Jamaica, Eastern Caribbean,
 Colombia
- FCC: Jamaica, Colombia
- USTTI: multitude of countries
- ESF conditionality: El Salvador, Lebanon



Telecommunications Reform in El Salvador and Guatemala









USAID Support for Telecommunications Reform in Guatemala & El Salvador

El Salvador:

- Seminars on "private solutions to public problems"
- Trip to Chile by policy makers (including VP), legislators, labor and private sector leaders and journalists
- ESF conditionality
- IDB funded consultant drafted telecommunications law
- Juan Belt helped draft privatization law

Guatemala

- Seminars
- Support for key reformers
- Trip to Berkeley by head of Telecom company & think-tank economist
- Financing of consultants who helped draft the legislation with local "think tank"
- Objective of both reforms was to promote development of sector rather than to obtain fiscal resources. One important aspect of this objective was that "telcos" were privatized without any exclusivity

Main Features of the Telecommunications Laws

- Promotion of competition was main objective
- Rates to final users established freely; had to be modified in El Salvador
- Privatization of different aspects regulation:
 - Alternate dispute resolution (ADR) mechanism
 - Property rights to spectrum
- Regulatory body with very limited discretion: enhanced credibility
- Mechanism to provide direct subsidies established: no cross subsidies: universal service fund

Promotion of Competition

Permanent

- Access to essential facilities, mainly interconnection
- Equal access to interconnected networks
- Alternate dispute resolution mechanism

Temporary measures

- Unbundling of local loop
- Presubscription prohibition
- Transitory price caps (in El Salvador) to final users & for interconnection charges

Access to Essential Facilities

- Interconnection at all feasible levels; charges based on LRAIC
- Charges become unbundeable tariffs
- Signaling
- Automatic transfer of calling party ID
- Listing in telephone books
- Access to telephone book data

Equal Access to Interconnected Networks

- Promotes multicarrier system
- Dialing parity: can not require users to dial additional numbers to access a rival carrier
- Number portability



Dispute Resolution

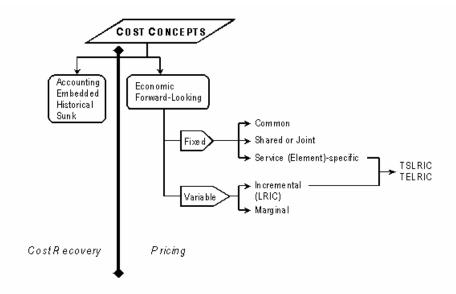
(mainly interconnection disputes)

- Parties must try to reach agreement in fixed time
- If negotiations fail, offers are submitted to regulator
- Well defined procedure for selecting private mediator for binding arbitration
- Arbitrator must choose one offer (final offer arbitration or "baseball rule")
- Law defines the relevant costs



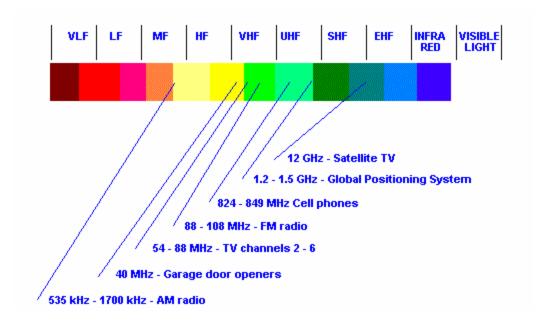
Estimation of Costs

- Long Run Average Incremental Costs: difference in firms total costs with and without supplied, divided by X
- Costs are based on the costs of an efficient firn "yardstick competition"
- Law defines precisely how the cost of capital is to be determined



Spectrum Management

- Auctions to establish property rights
- Property rights absolute: any use permissible and spectrum can be fragmented in any dimension (vertical, geographical and in time)



- Owner can sell, rent & mortgage rights
- Only restriction is not to cause interference; regulator sanctions interference

Subsidies

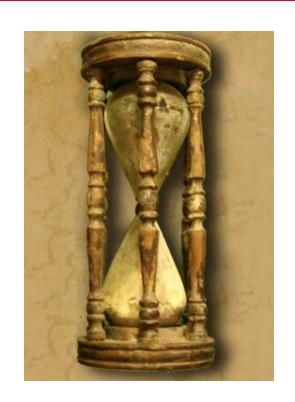
- Cross subsidies eliminated
- Direct subsidies in low income areas
- Direct subsidies in Guatemala from fund financed with proceeds from spectrum sales: "universal service fund" (USF)
- Direct subsidies in El Salvador for electricity & telecommunications from fund financed by national budget
- World Bank: study of USFs in LAC

Superintendency

- Seven year term in El Salvador (named by President) and indefinite in Guatemala (named by Minister)
- Change in law in El Salvador in response to pressure from rent seekers
- Financed by spectrum sales in Guatemala and national budget in El Salvador

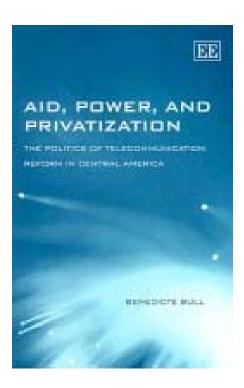
Administrative Silence

- Regulators must resolve issues within specified time limits
- If prescribed time lapses, resolved in favor of requester



El Salvador: Support for Privatization

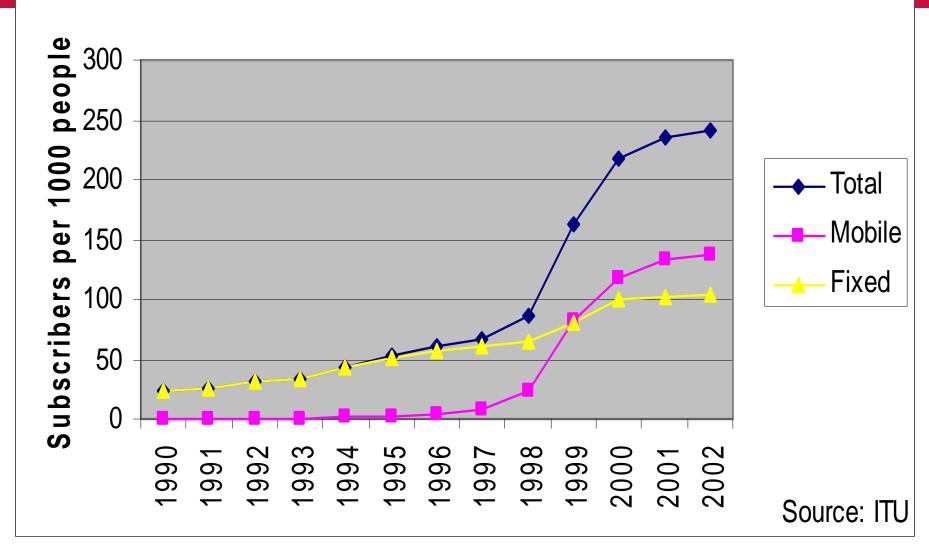
- After 1997 elections, privatization law derogated with "veto proof" majority
- WSJ sounds alarm
- Committee of Legislative Assembly (leaders of the six parties) formed to draft new law
- US Ambassador offers help
- Presentation to political leaders
- Technical committee formed
- Support for several months
 - USAID staff
 - Consultants
- New law enacted
- Enterprise privatized



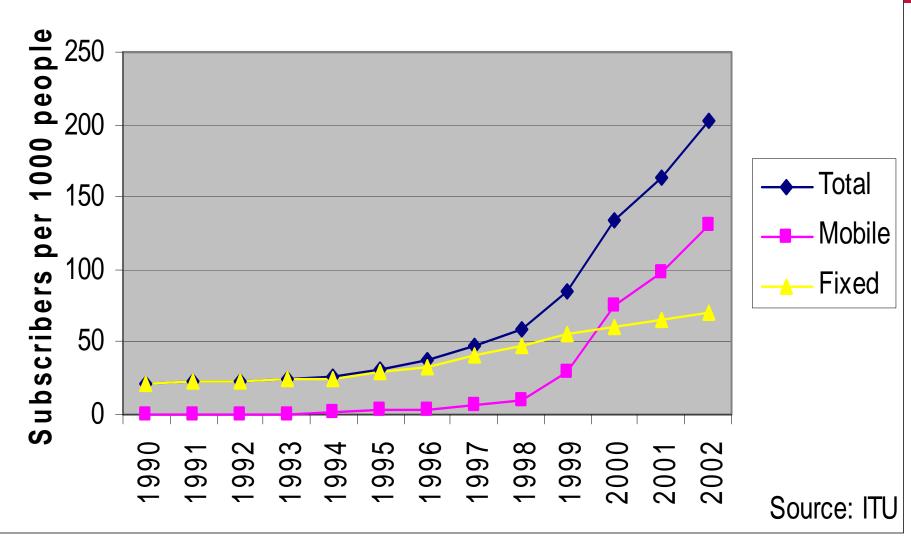
Main Results

- Guatemala and El Salvador have the most modern regulatory frameworks in the world
- The telecommunications reforms received USAID support of different types
- Both companies were sold and sale prices were average for the time, not much lower as was predicted by investment banks & others
- Some results are shown in the following graphs

Fixed Line and Mobile Phones in El Salvador



Fixed Line and Mobile Phones in Guatemala



Conclusions

- Telecommunications important for economic growth
- USAID involved in many countries using multiple instruments
- Competition more important than privatization
- Competition easier in telecommunications than in other sectors: wireless solutions
- Conditionality not as effective as the promotion of ideas
- Need to use top consultants
- Need to identify & support key reformers

Any questions?

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