

**NERA**

Economic Consulting

# Regulatory Trends & Forecasts in Latin America, with a Focus on the Mobile Industry



Presented at the Organization of Caribbean Utility Regulators' 3<sup>rd</sup> Annual Conference

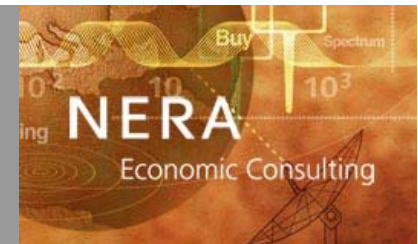
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Nassau, Bahamas

November 2, 2005

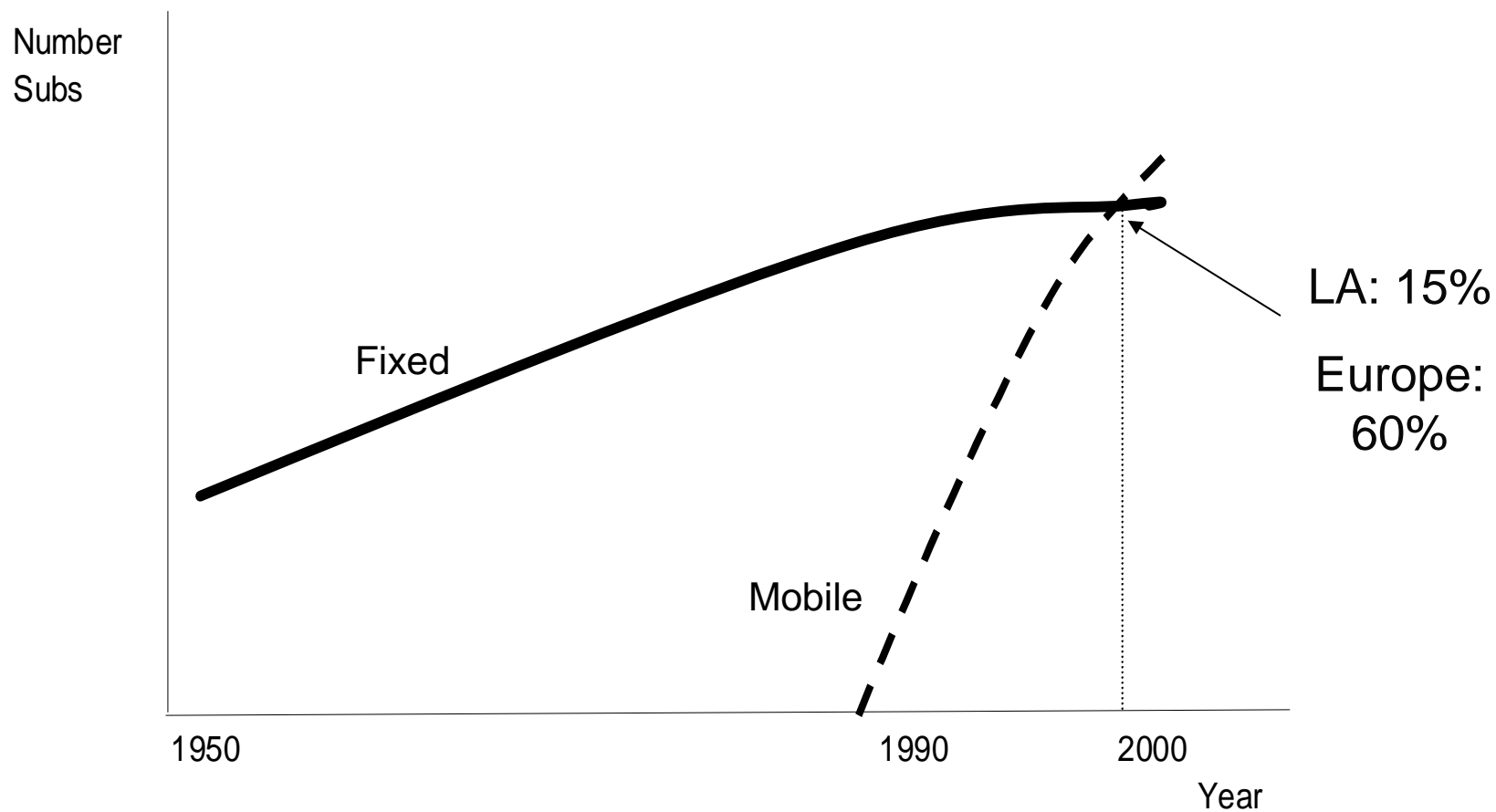
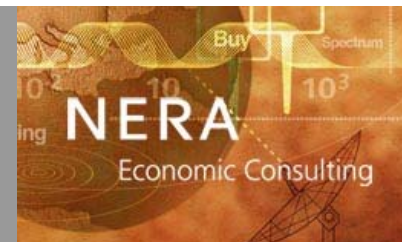
**How Markets Work<sup>SM</sup>**

# Results of Mobile Industry in LA

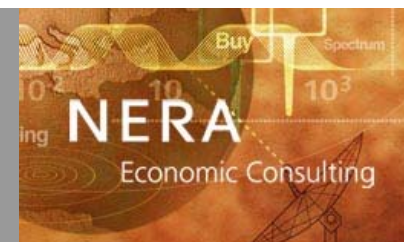


- Success history.
  - Steady *price reduction* over the years (two-digit annual rate reduction),
  - Sustained *output growth* (two-digit annual growth rates),
  - Constant improvement of *quality of service*
  - Higher penetration in low-income groups. Example: in Chile mobile penetration in rural areas (where poverty is more acute than urban areas) is 25%, while fixed penetration is just 9%.
  
- Results in most of Latin America countries, as well as other countries elsewhere (Europe, North-America, Asia, etc.)

# Quick and Substantial Mobile Penetration



# Mobile Market Structure and Performance in Latin America



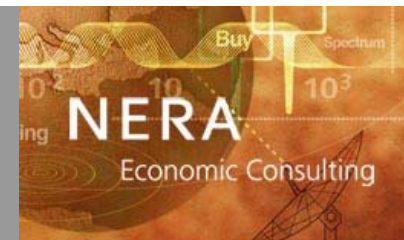
	<i>Number Players</i>		<i>Penetration ' 05</i>	<i>Price **</i>	<i>MOUs</i>	<i>GDP/Capita</i>
Argentina	4	*	50%	\$0.11	133	\$3,750
Bolivia	3		22%	\$0.21	65	\$891
Brazil	4 to 6	*	44%	\$0.14	87	\$891
Chile	4	*	72%	\$0.13	104	\$5,910
Colombia	4	*	38%	\$0.09	159	\$2,120
Costa Rica	1		23%	\$0.10	256	\$4,270
Ecuador	3		50%	\$0.20	69	\$2,270
El Salvador	4		31%	\$0.26	73	\$3,630
Guatemala	3		28%	\$0.10	160	\$4,990
Honduras	2		15%	\$0.23	78	\$2,700
Mexico	5	*	43%	\$0.21	88	\$6,445
Nicaragua	3		18%	\$0.41	45	\$2,580
Panama	2		44%	\$0.38	88	\$9,200
Paraguay	4		24%	\$0.12	82	\$1,085
Peru	3	*	22%	\$0.21	85	\$2,430
Uruguay	3		27%	\$0.14	79	\$3,770
Venezuela	4		50%	\$0.30	80	\$4,280
<b>LA</b>			<b>41%</b>	<b>\$0.16</b>	<b>99</b>	<b>\$3,915</b>
Minimum	1		15%	\$0.09	45	\$891
Maximun	5		72%	\$0.41	256	\$9,200
Memo						
Population M			521			

\* It includes a trunking operator

\*\* ARPU / MOUs

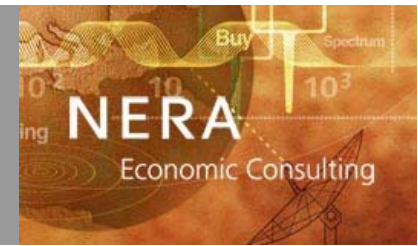
Source: Pyramid Research

# What does the data tell us in LA as of 2005?



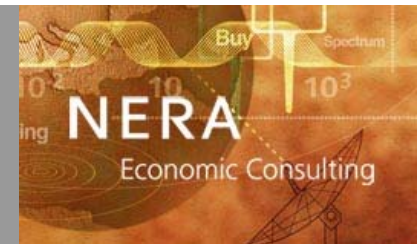
	<b>Penetration</b>	<b>MOUs</b>
10% Price Decrease	2%	7%
10% Increase GDP per-capita	3%	2%
10% Increase Number of Firms	7%	-3%
R-2 Adjusted	38%	81%

# Drivers of the success



- **1. Facility-based competition** : achieved with between 2 to 4 firms in the market. Each firm deploys end-to-end infrastructure (not just service-based competition such as local and long distance)
- **2. Light-handed regulation.**
  - Government frequency allocation
  - Government collaboration to introduce Calling-Party-Pays (CPP)
  - Government mediation of interconnection disputes
- **3. Innovative pricing**
  - Subsidized access to service (handsets) implemented by own industry,
  - Price plans for everybody: *Prepaid* (“pay-as-you-go”) targeted to household, *Bucket* plans for postpaid targeted to corporate, etc
  - On net/Off net
- **4. Constant technological innovations** passed-through consumers: new services (i.e. SMS, multimedia, Internet access, etc), upgraded handsets, better quality of service.

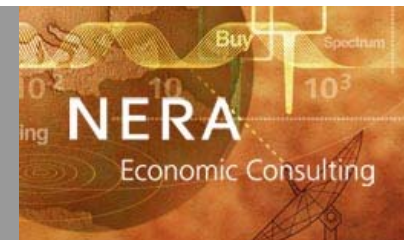
# Little bit of Regulatory History in LA: 80's and early 90's (1)



## Regulation focused on Incumbent Local Exchange Carriers:

- Economic reforms (liberalization, privatization) also implemented in telecom. The “Washington consensus” (World Bank, IMF’s policies) was the accepted tenet.
- Privatization of PTTs, encouragement of foreign investment
- Creation of regulatory bodies, new Laws, regulations, etc.
- Regulation focused on interconnection rules to accommodate for new entrants (long distance carriers, mobile operators), price-caps, quality of service, universal service funds.

# Regulation of telecom in the late 90's (2)

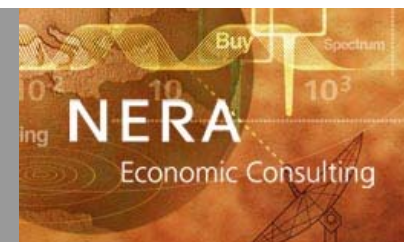


## Mobile sector

- Gradual opening up of mobile industry through new spectrum auctions.
- Governments attracted new investment by implementing legal and contractual commitments, stable rules of game (“concessions contracts”, etc)
- “Calling Party Pays” (CPP) is introduced for landline-to-mobile calls



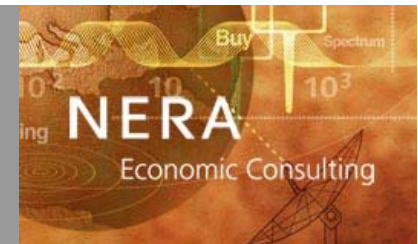
# But...Latest Regulatory Trends for Mobile Industry



## Regulatory Intrusion

- At the extent that regulation of fixed network of incumbent was in place, regulators start shifting attention to the most dynamic sector: the mobile sector.
- Regulators view that fixed to mobile tariffs and/or mobile termination fees are too high: “mobile termination is a bottleneck”.
- “Copycat” regulation: Copying regulatory fixed framework to mobile networks and regulatory framework from Europe to LA: number portability, termination charges, etc
- Increasing populist views (i.e. consumer associations, politicians, economic crisis)

# Other factors affecting regulation and industry conduct (1)



## **High Taxation of Mobile Industry**

- Based on the incorrect view that cellular is a “luxury” service while fixed telephony is a “necessity” service
- Based on a desire to “milk” a “cash-cow” during economic crisis (i.e. Uruguay, Argentina, Mexico)

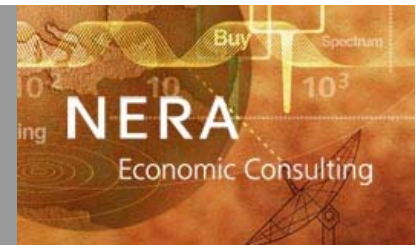
## **Consolidation of industry**

- U.S. companies focus on U.S., got out of L.A. (Verizon, BellSouth)
- Two Regional players: America Movil (Mexico) and Telefonica Moviles (Spain)

## **State-owned mobile operators (“back to the future”)**

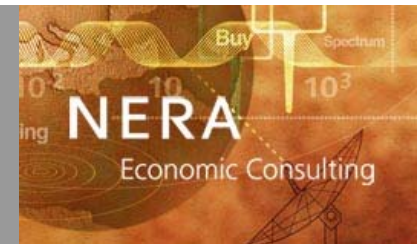
- Ecuador, Colombia, Uruguay, Costa Rica, Venezuela (?)
- Conflict of interest: regulator and state-owned company vis-à-vis other competitors

## Other factors affecting regulation and industry conduct (2)



- Rising of a new regulator: Municipalities, local governments. Example:
  - Harder license, permit requirements to install antennas
  - Creating new taxes or raising existing fees on industry
  - Regulations on radio emissions
  
- Environmental groups: pushing for new restrictions of antennas on environmental or urban development basis

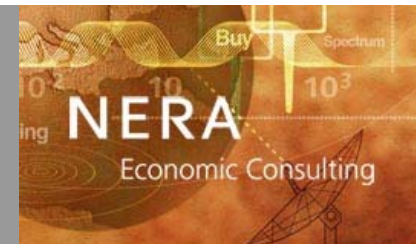
# Other factors affecting regulation and industry conduct (3)



## International Arena

- WTO/GATS, most countries have signed the basic telecommunication agreement
- U.S. Trade Negotiations: Chile, CAFTA, Andean countries, etc.
  - Conditions on mobile operators (“dominant”, cost-based termination charges, etc)
  - U.S. carriers pushing for reductions on mobile terminations of international calls in developing countries.
- U.S. Government’s organizations (U.S.T.R, FCC) advocating LA Governments reduce mobile termination rates

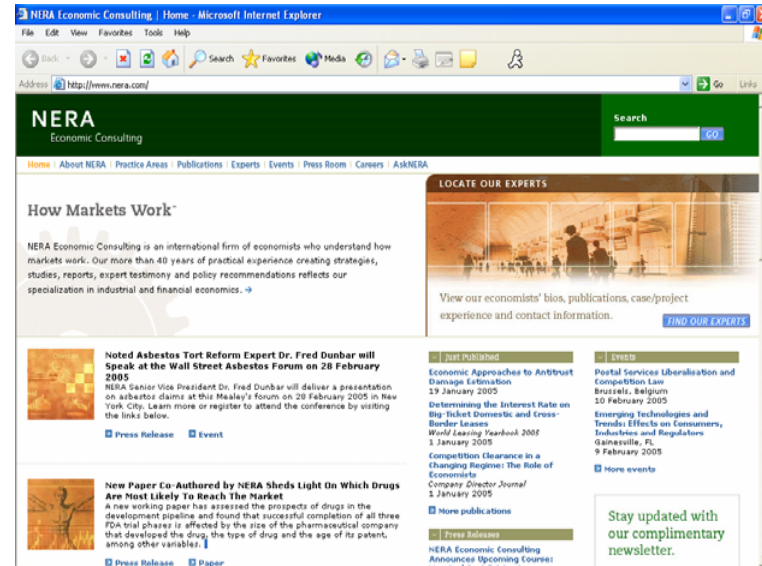
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