

Economics of Entry and Telecommunications Regulation

Simon Wilkie

Center for Communications Law and Policy
USC Law School

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Overview

- Review of market definition & structure
- Economics of Regulation/Deregulation
- Issue 1 Bundled Products
- Issue 2 Market Segmentation
- Issue 3 Barriers to Entry
- Issue 4 Wireless Entry

Market Definition

- Challenges to traditional regulatory market definitions: Voice Cable TV Wireless
- Bundled products what is the good?
- What is market dominance in a bundle if competitors have different mix of products
- Services versus access to networks
- Market segmentation and price discrimination
- Geographic market definition and deployment
- Important to get the economics right!

Market Definition

- What is the product?
- Access versus Telecom Services
- Wireless substitution
 - Minutes migration to wireless
 - No economic evidence of access substitution
- VOIP versus POTS
 - Cable entrants and others deploying VOIP
 - Rapid adoption in last few years
 - Minute substitution
 - Number Portability Data suggests VOIP does not provide as strong a competitor for access as POTS
- Premature Deregulation may harm consumers

Natural Monopoly Issues

- Large Fixed Costs
 - Costs are “sunk” and not reversible
 - E.G. Verizon’s FIOS build
- Average unit cost falling over the relevant range
- “Dumb Pipe Paradox”
- Should expect strategic behavior
- 1996 Aims to replace regulation with competition
- Naïve deregulation may fail

Issue 1: Bundled Products

- Traditional Economic Model of Bundling
 - Bundle substitutes to raise “stand alone prices”
 - Bundled discounts
- Not that relevant telecom services
 - Industry tells us driver is reduced churn
- Increase the NPV of a customer even with no change in prices

Issue 1: Bundled Products

- Model of “Viscous Demand” Radner 2003 JET
- Consumers don’t always look at their bills
 - Transaction & Information costs
 - Consumers only churn if an “event” triggers re-optimization
- Bundling increases the “shock threshold”
 - Consumers have to change 3 services not 1
- Equilibrium with price dispersion
- Means welfare analysis is tricky

Issue 2: Segmentation and Competition

Raising Prices

- Market composed of different segments
- Entrant targets one specific segment
- Leads to more differentiated products
- All prices may rise
 - Consumers left behind not targeted by the entrant.
- Welfare Analysis is not obvious

Issue 2: Segmentation and Competition

Raising Prices

- Theory: Chen and Riordan
 - Economics working paper CU Boulder
- Case Study 1 DBS versus Cable
 - Goolsbee and Petrin working paper version 2001
- Case Study 2 Broadband
 - Chen and Savage Working paper CU Boulder 2007
- Case Study 3 Price Flexibility in California
 - Prices rises for basic services

Issue 3: Barriers to Entry

- Interconnection
 - Agreements may be difficult
 - Delays entry and costly litigation raise rivals costs
- Exclusive Provider Agreements
 - Master Planned Communities
 - FCC focused on Video but also applies to Telecom
 - Can exclude entry but speed deployment
- Special Access Issues
 - Essential Input for telecom entrants
 - Incentive to raise rivals costs
 - FCC capped SBC VZ prices in 2005 mergers
 - Cap expires fear of price hikes and discrimination

Issue 4: Wireless entry

- Limited wireless competitor for wireline access & broadband (Leap Metro PCS)
- Long history of wireless entrant failure and exit
- AWS auction; No significant new entry
- 700 MHz auction: best opportunity for entry
- Spectrum caps worked in 1994
 - Auction with no caps = Incumbent merging with entrants with no DoJ review
- Caps in auction but not holdings
 - Transfers would lead to DoJ & FCC merger review

Summary

- Market is evolving
- New products, technology, and strategies
- More economic analysis is required
- Both naïve regulation and deregulation without analysis may harm consumers