

# Assessing Retail Competition

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David Loomis  
Illinois State University  
309-438-7979  
dloomis@ilstu.edu

# Overview

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- Market Characteristics
- Standard Measures of Market Competitiveness
- A Model of Customer Switching
- Alternative Market Share Measures - AMS and NMMS
- Lessons from Telecommunications

# Characteristics of a Perfectly Competitive Market

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- Many buyers and sellers who are price takers
- No barriers to entry or exit
- Mobility of factors of production
- Perfect information
- Profit-maximizing firms

# Characteristics of Network Industries

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- Customer is 'attached' to a fixed network
- Network maintained by regulated entity (may also be default provider)
- Customer must be linked with a provider during 'new connect'
- Purchases automatically recur unless the customer switches

# Characteristics that Impact Market Share Measurement

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- Passive Demand
- Presence of a Default Provider
- Imperfect Information

# Unique Characteristics of Electric Markets

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- Inelastic Demand
- Peak Characteristics
- Transmission Constraints
- Properties of Electricity

# Standard Measures of Market Competitiveness

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- Structure
  - Size and number of competitors
- Conduct
  - Pricing and marketing strategies and behavior
- Performance
  - Profitability

# Structure Measures

- Regular Market Share (unit/revenue)
  - Alcoa (1945) - Judge Learned Hand stated that 90% of a market "is enough to constitute a monopoly; it is doubtful whether 60 or 64 % would be enough; and certainly 33 percent is not."
- Herfindahl Index - Merger Guidelines
  - If H is over 1800, "highly concentrated." If 1000-1800, "moderately concentrated." Under 1000, "unconcentrated."



# Passive vs. Active Demand

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- Network Industries - provider decision once, continues until switch
- Other Markets, active choice of brand for each purchase

# Implications for Market Share

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- Traditional analysis implicitly assumes active demand
- Total Market Share overemphasizes past decisions
- Extremely affected by how decision is introduced

# Model

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- Two stage - searching and switching
- $H$  - shopping cost
- $W$  - incumbent brand equity
- $E$  - effort expended to switch

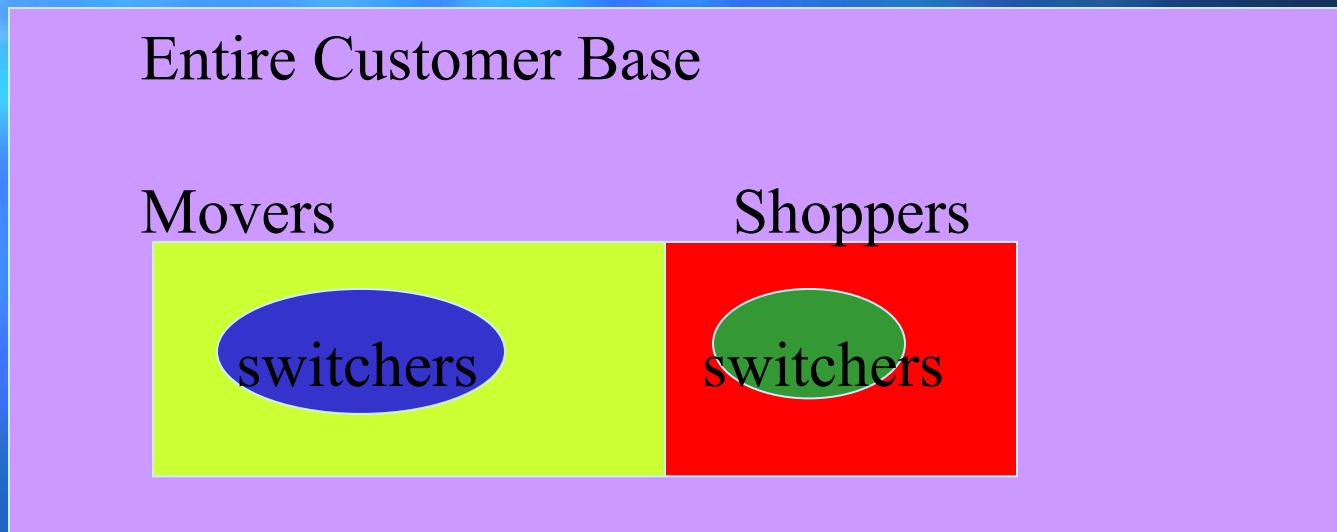
# First Stage - Shopping

- Customer will shop if  $[P^I - E(P^C)]q_i > H + W + E$
- So customers shop with higher usage than
- $q_i > (H+W+E)/(P^I - \alpha P^I) = q_x$

# Second Stage - Switch

- Customer will switch if  $[P^I - P^C]q_i > W + E$
- So customers switch with higher usage than
- $q_i > (W + E) / (P^I - P^C) = q_s$
- Usage M.S. is less than # of customer M.S.

# Active MS and New Move MS



- AMS describes real-time decisions, but is difficult to measure.
- NMMS approximates AMS when customers can choose during new-connect

# New Move Market Share

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- Easy to measure: supplier choices of new connects are easily observable
- Reflects decisions during an 'active choice' time
- 'Real Time' measure showing current activity
- Highlights the importance of operational details (sign-up procedures)

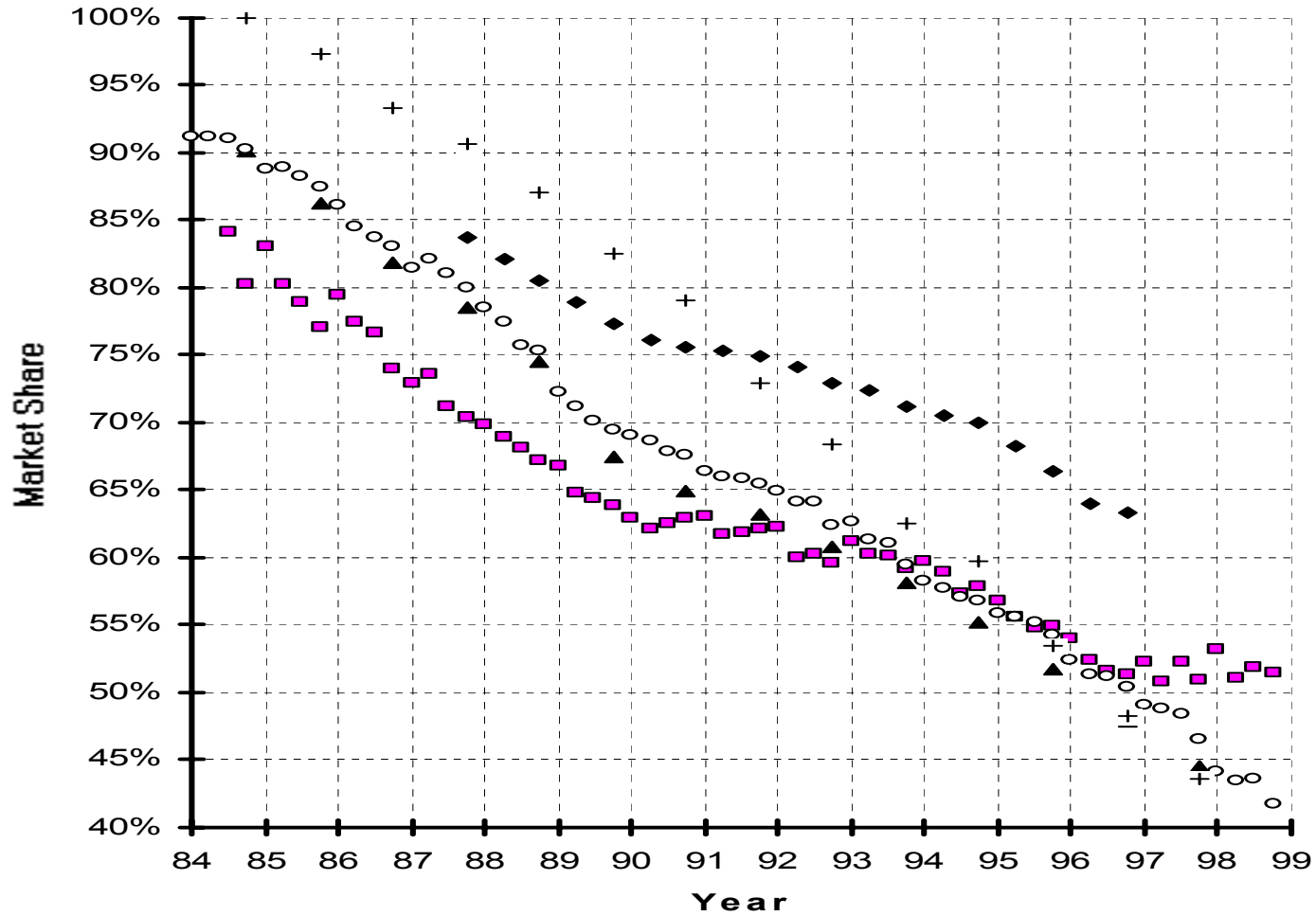
# Lessons From Telecommunications

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- “Success” Case – Long Distance
- “Failure” Case - Local



# CHART A1.2 - INDICATORS OF AT&T MARKET SHARE

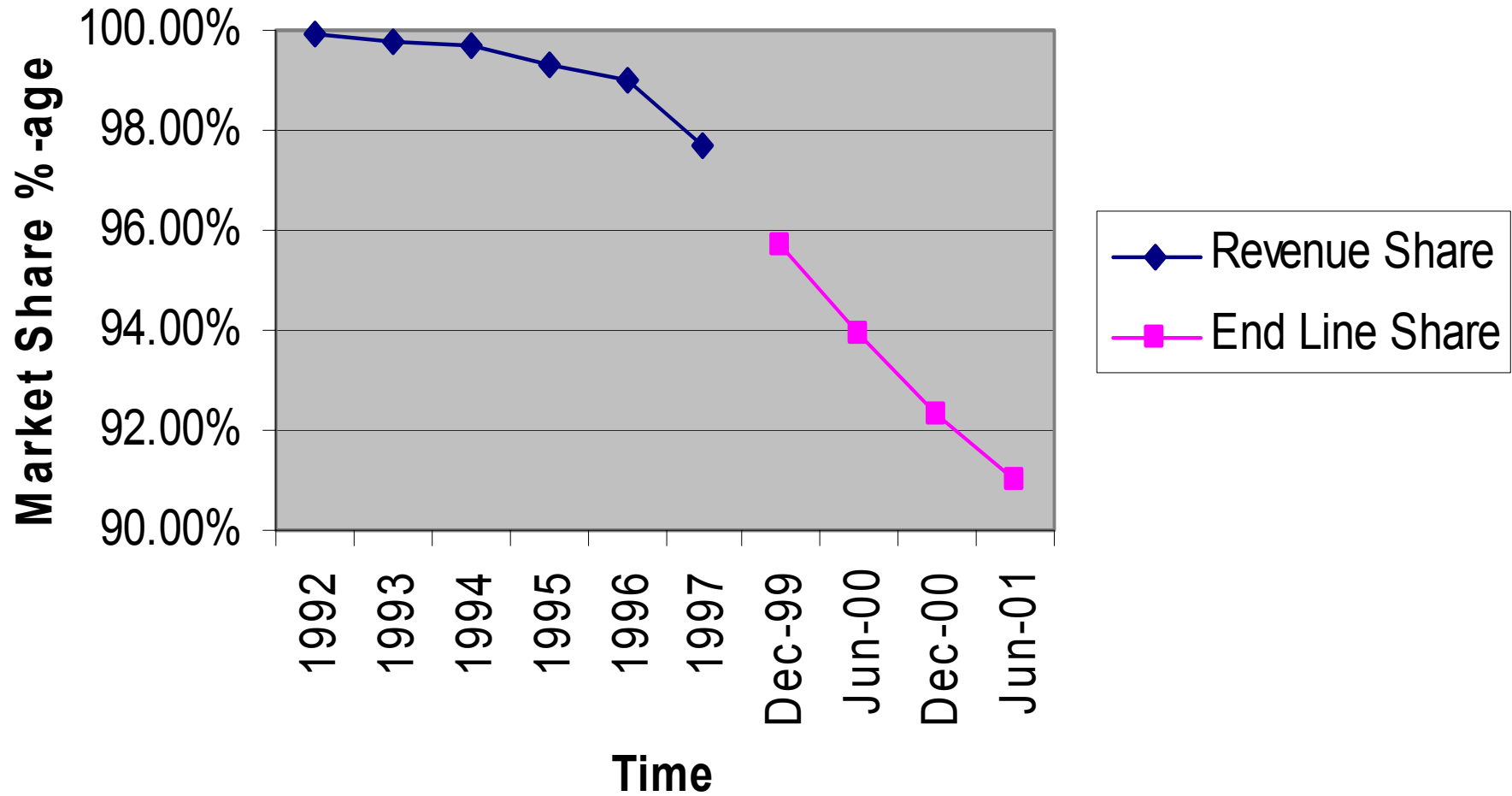


# Lessons from Long Distance

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- Market share for the incumbent may fall slowly and take a long time to decline to competitive level
- Access charges were discounted to competitors
- Competitive state may mean only a few large providers
- Short run excess profits may earned by incumbent – attracts entry

# ILEC Market Share by Time Period



# Lessons from Local Telecommunications

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- Barriers to entry is the single most important factor in determining competition
- “All competition is local”
- Mere presence of competitors is insufficient

# Conclusions

- Traditional Market Share measures do not accurately reflect current decisions
- Active Market Share is a better approach, but is hard to measure
- New Mover Market Share approximates AMS and is easy to measure
- Barriers to entry must be monitored

# References

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- Loomis, David G. and Eric Malm, "Active Market Share: Measuring Competitiveness in Retail Energy Markets," *Utilities Policy*, Vol. 8 No. 4, 1999.
- Loomis, David G. and Eric Malm, "The Devil in the Details: An Analysis of Default Service and Switching," 20th Annual Advanced Workshop on Regulation and Competition, May 24, 2001.