

# Network Neutrality Regulation

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# What is Network Neutrality?

- Washington answer
- Real-world answer

# Washington



# Three FCC rules for broadband ISPs

1. disclosure
2. no discrimination between traffic
3. no blocking

# Real World



# We don't know.

- “Reasonable network management”
  - necessary
  - presumptively legal
- Network of Networks not “neutral”
- Backbone ISPs “peer,” charge for “transit”
- Small ISPs routinely “block” (service agreements)
- ‘net grows with pay-to-play bargains
- contracts are features, not bugs

# Non-neutrality

- AOL's "walled garden" in 1990s
- i-mode and the birth of the 'wireless web'
- Google's 2002 life-changing deal with AOL
- "digital phone" customers pay for bandwidth
- Apple's iconic innovations tied to App Store
- Content Delivery Networks sell "fast lanes"

# Political Equilibrium

- regulatory agency passes rules
- D.C. Circuit over-rules them
  - 2007 (“Comcast”), 2010 (“Open Internet”)
- 2014 → pressure for bold move
- Title II – public utility regulation for BB ISPs



# Why Not Title II?

- FCC 1999: we would not have an Internet
  - deregulation for “enhanced services” key
  - dial-up ISPs blocked by per-minute access charges
  - Voice-over-Internet (VoIP) battled states, Title II
  - cable TV broadband never regulated
- We still have Title II regulation
  - not much happening there

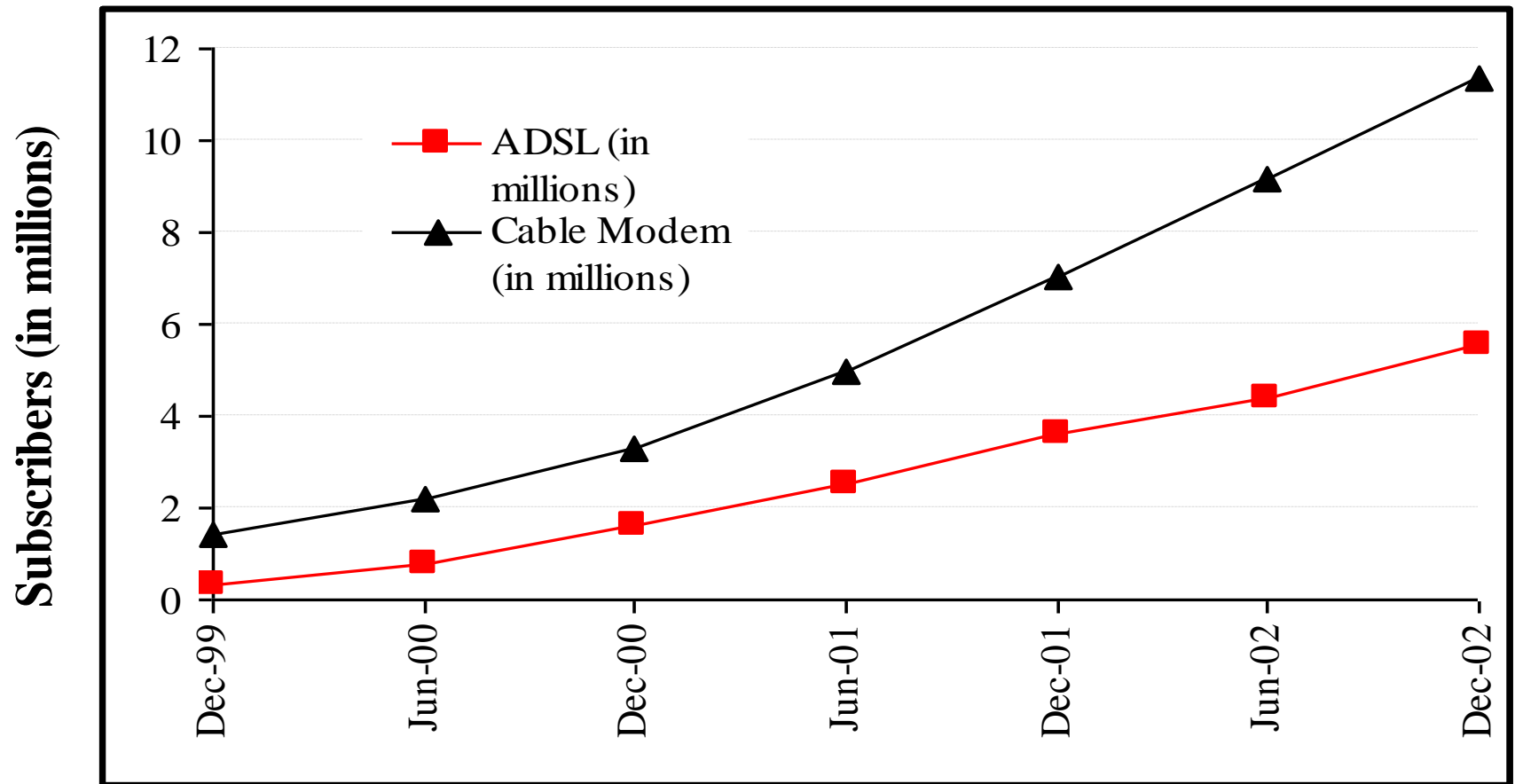
# Empirical Evidence

- Cable modems (CM) never regulated
- Telco broadband (ADSL) regulated, deregulated
- Thomas Hazlett & Anil Caliskan, “Natural Experiments in Broadband Regulation,” *Review of Network Economics* (2008)

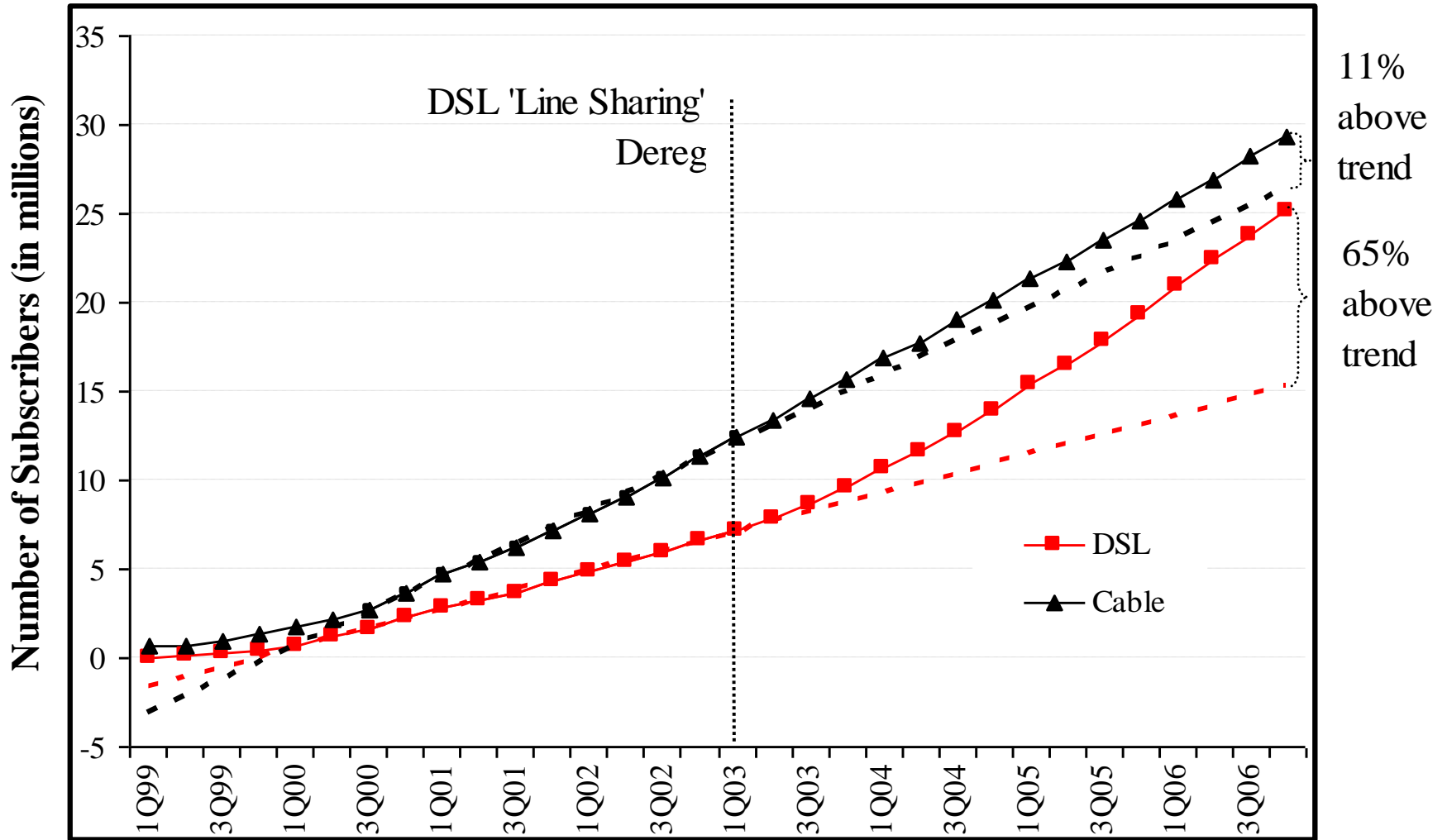
# Three Regulatory Regimes

<i>Period</i>	<i>Cable Modems</i>	<i>Telecoms/DSL</i>
before 20031Q	unregulated	regulated with “line sharing” obligation
20031Q to 20053Q	unregulated	regulated but no “line sharing”
20053Q to present	unregulated	deregulated

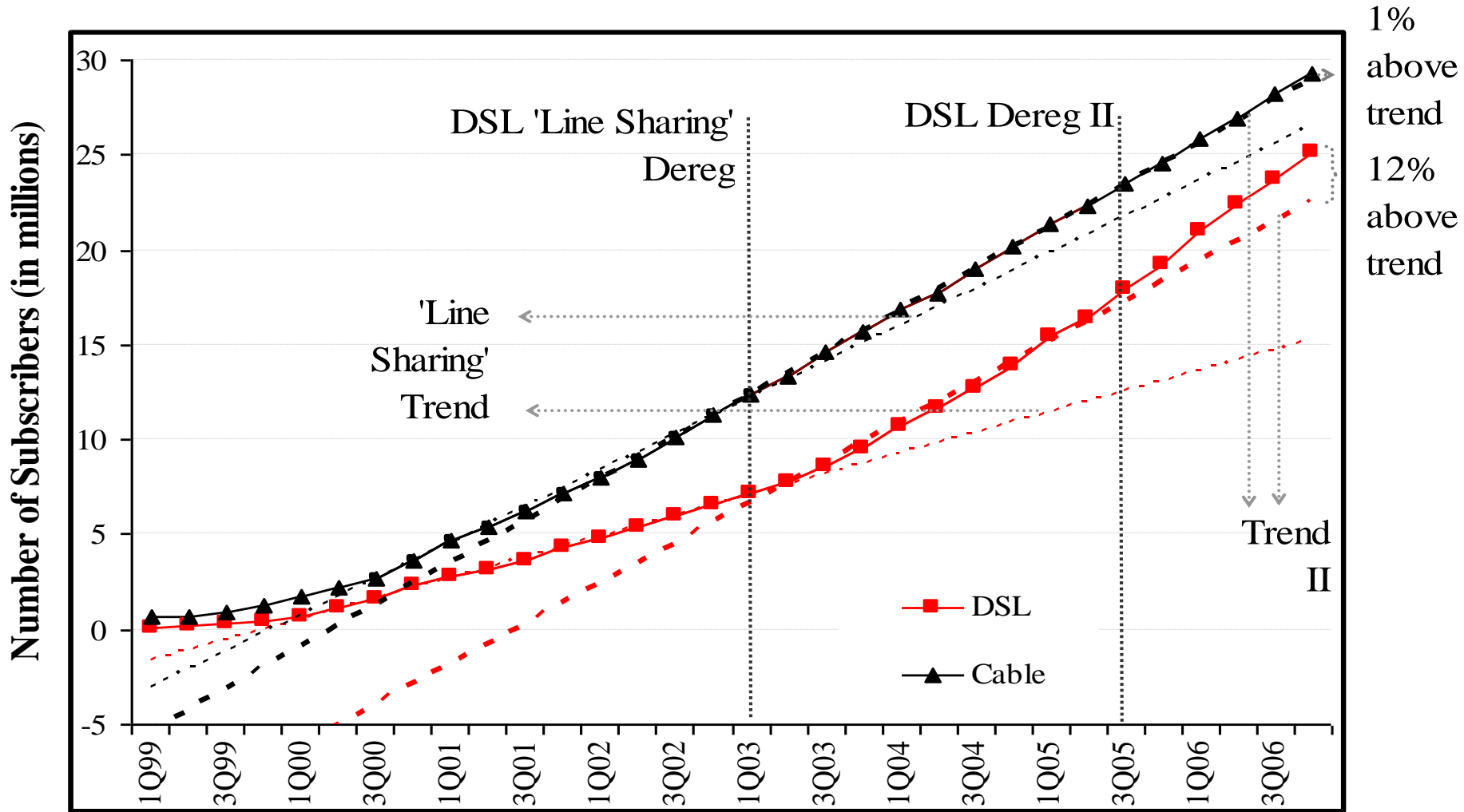
# 1<sup>st</sup> Period: Cable Dominates



# 2<sup>nd</sup> Period: DSL Surges



# 3<sup>rd</sup> Period: DSL Surges Again



# Summary

- U.S. broadband reg evidence available
  - less regulated networks → higher growth
    - adjusting for trends, other factors
- also appears to obtain for ultra-BB (fiber)

# How does NN work?

- We know how it did work.
- First complaint under 2010 rules: MetroPCS
- Complaint invited in the 2010 Order.



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Ah, there always has to be fine print, doesn't there? Don't get us wrong -- \$40 for unlimited talk and text alone is still a pretty fantastic deal in the scheme of things -- but in tweaking [its LTE service plans](#) today, [MetroPCS](#) has made the data situation just a little confusing. Technically, the \$40 plan also includes unlimited web access plus YouTube... but at the \$50 price point, you get 1GB of "additional data access" for features that aren't covered under MetroPCS' definition of "web browsing." You also get turn-by-turn navigation, international text messaging, access to corporate email accounts (another arbitrary distinction that we'd kind of like to see go away), and audio / video features through the carrier's MetroSTUDIO service. At \$60, you get unlimited access to MetroSTUDIO including 18 channels of on-demand video content. MetroPCS' lowest-cost LTE offering had previously been \$55, so it's a step in the right direction -- but pro-net neutrality? Yeah, not so much. Follow the break for the press release.

Engadget (Jan. 3, 2011);  
<http://www.engadget.com/2011/01/03/metropcs-tweaks-lte-plans-40-gets-you-unlimited-talk-text-an/>

# Alternative Path

- Antitrust statutes outlaw vertical foreclosure
- Existing policy → case by case
- NN → categorically outlaws efficient activities
- Folly to assume it is endemic
- And destructive of the Internet

# Thank You.