"Traditional Market Power"
or
“Three adults & a baby”

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Thanks

- Thanks for the opportunity to talk.
  - The email asked for volunteers. I was going to present a standard textbook presentation of measuring monopoly.
  - In my role at NBER I have been thinking about “digital dark matter” – economic activity in the digital economy that standard GDP measurement fails to capture. Could not help but see (or not see) some digital dark matter here…
  - Try to frame a few questions…
What does this talk do?

- Do traditional economic measurement of monopoly offer guidance to measurement for communications policy?
  - Under premise that the country will experience concentrated access supply, and will face a range of policy issues related to that.
- Definition of traditional: it has shown up in a respectable economic textbook for at least half a century.
  - Three adults: textbook GDP measurement; a regulatory adult; an antitrust adult. The baby: multi-sided platforms.
- My first big point: We tend to conflate the three adults, but should not. My second big point: There is more digital dark matter than one might have thought. My third big point: it is not clear our standard approaches are useful in this context.
Standard textbook GDP measurement: Cannot get “price”...

- Measure price?
  - Why? W/ revenue, it gives us Q.
  - Gross margin. How to interpret when fixed costs are large?
  - We do that already in the CPI. Is it informative? Actually, we do not do this well…

- Price & user satisfaction differ.
  - Measure WTP (Rosston, Savage & Waldman) for NBP. Different from GDP.

- Do not yet measure contribution of Internet to economy.

### CPI for Internet access

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
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<tbody>
<tr>
<td>2007</td>
<td>73.2</td>
</tr>
<tr>
<td>2008</td>
<td>73.9</td>
</tr>
<tr>
<td>2009</td>
<td>76.5</td>
</tr>
<tr>
<td>2010</td>
<td>77.0</td>
</tr>
<tr>
<td>2011</td>
<td>76.3</td>
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Despite widely measured gain in access quality – SamKnows & Ookla both show it – CPI shows little price decline, and does not incorporate gain from qualitative improvement.
Does treatment of monopoly in antitrust offer guidance? Well…

- No presumption of monopoly unless proven in hearings.
  - Legal proceedings: Burden of proof lies w/prosecutor (sort of).
    - Market def’n in court. Broad/narrow favors firm/prosecutor. SSNIP: small significant non-transitory increase in price.
    - Market def’n for administrative review, such as FTC/DOJ under merger guidelines. FCC review when it has jurisdiction (e.g., AT&T-TM).
- Market share alone not sufficient…
  - It is very expensive to do: moving target behind measurement.
    - Measuring substitution b/w wireline/wireless data use. Substitutions for which users deploying which services in which locations?
- Habit in antitrust not great for many policy questions…
  - Uninformative about innovation, about operations of the network, for many key questions…

Does regulatory monopoly offer useful example? Well...

- Presumption of monopoly or lack of close substitutes.
  - Burden of proof lies w/firm to show no monopoly power (e.g., telephone firm and in adjacent markets).
    - BTW, usually a foundation in law, which is problematic here…
- Two regulatory instruments – price and profits limits – have challenging measurement components.
  - Accounting tricks to manipulate price indices & profit levels…
    - If we do not measure prices well, do we really want to go back to this?
  - Non-price measurement: Tendency to police “discriminatory behavior” by using bright lines (e.g., Computer II).
- Habit in antitrust not great for many policy questions…
  - Uninformative about innovation, about operations of the network, for many key questions…
Two instructive examples for illustrating role of measurement

- AT&T lost T-Mobile a textbook horizontal merger.
  - No way around fact that supply was already concentrated.
    - Especially in local geographies…
  - Merger would concentrate it further & efficiency gains modest.
    - The lawyers knew it. It’s in guidelines. Judges everywhere accept this…
- Comcast was able to merge with NBC…
  - Vertical merger with potential for concentrated distribution.
  - Market def’n framed merger around a classic debate…Can a monopolist in distribution merge with supplier of content?
    - Yes, (simplifying) after they adopt a consent decree – namely, Comcast promises to treat own and outside content in non-discriminatory way.
    - If wireless/wireline becomes substitutes, this won’t be necessary…
The baby, multisided platform (and growing fast)

- Used to be just newspapers, weeklies, etc.
- Then it applied to O-systems, Walled Gardens, Open source…
- Internet access at risk to be bundled with other services.
  - If AOL-TW merger had succeeded, would be wrestling w/this now…
  - Horizon: Comcast, Google, Apple, Facebook moving in this direction…

- Some commonalities across most platforms
  - Reduce search or transaction costs, help others build.
  - Shares resources across user base. Usually a network effect.
  - Also common: One side pays & the other is free.
    - Feels like a monopoly to paying side. Just ask advertisers who have no choice but to bid on Google, or sites using SEO to appear high on search.
Summary

- Long history of economic measurement in concentrated industries in communications, and some lessons for access.
  - I would not call the history inspiring.
  - Measurement tends to work best when married to good judgment & efficient review processes and absence of *ad hoc* policy making.
  - We are not doing a good job measuring this stuff for GDP, so I am not sure we will do any better with traditional approaches to measuring monopoly in a regulatory setting.
- And watch out for the teenager. Will be a grown up soon.
Thanks

- Thanks for listening.