Building the Broadband Economy and Society

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Broadband Policymaking?
Deployment of Broadband and Deployment of Arguments about Broadband

Consumer Technology Adoption

Opinions about Broadband Deployment

Years

(Household Penetration)

- CD Players
- Broadband*
- Cellphone
- Color TV, VCR

*3Q2001; Sources: ebrain.org; Telechoice, Cable Datacom News, DSL Prime
Does theory clear up the Net Neutrality debate?

Proposition 4 Suppose the connection quality offered when the platform is subject to a single-product restriction exceeds the lowest technically feasible quality level (i.e., $qr > q$). If $qr(\cdot)$ dominates $qu(\cdot)$ in the sense of second-order stochastic dominance, then the single-product restriction lowers welfare.
So What do we Know?

- Ev Erlich
  - Broadband market structure is concentrated, but performance has been laudable
  - Competition ("the cavalry") is coming
    » 3-G, WI-FI, WI-MAX and BPL
  - The “Special Nature” of Broadband Competition”
    » High Fixed costs → quality competition to fill up pipes
Rob Atkinson

- Fixed costs of Broadband deployment are very high
- Consequently, there is a trade-off between efficient market structure and competition
What do we know?

- Broadband is a nascent, evolving technology
- Broadband is a nascent, evolving business model
- Prices for Broadband service in the US have fallen
- Output (deployment and adoption) have increased dramatically
- Innovative uses for the Web have burgeoned
Where are we headed?

- Today, behavior is very competitive
- Consumers are benefiting from lower prices, higher speeds, expanding output
- Could market become less competitive and need greater regulatory oversight?
  - Theoretically, yes
- Is there a need to rush to (big R) Regulate?
  - Observed behavior suggests “no”
  - Available tools: antitrust/regulation
  - Enable Markets (Spectrum; municipal franchise reform)
- But what about our international position?
## United States Rankings on Major World Metrics

<table>
<thead>
<tr>
<th>Issue</th>
<th>Rank/Year</th>
<th>#1 Country</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Literacy</td>
<td>10 /1998</td>
<td>Sweden</td>
<td>OECD</td>
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<tr>
<td>Infant Mortality</td>
<td>10 /2006</td>
<td>Sweden</td>
<td>CNN/ Save the Children</td>
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<tr>
<td>Mathematical Literacy (7th graders)</td>
<td>23 /1996</td>
<td>Singapore</td>
<td>Boston College</td>
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<tr>
<td>Health Expenditure per capita</td>
<td>1 /2003</td>
<td>USA</td>
<td>Kaiser Family Foundation</td>
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<tr>
<td>Life Expectancy</td>
<td>6 /2005</td>
<td>San Marino</td>
<td>WHO</td>
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<tr>
<td>Freedom of the Press</td>
<td>23 / 2006</td>
<td>Finland</td>
<td>Reporters without Borders</td>
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<td>Efficiency of Health System</td>
<td>37 / 2000</td>
<td>France</td>
<td>WHO</td>
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<tr>
<td><strong>Broadband Penetration</strong></td>
<td><strong>12 /2007</strong></td>
<td><strong>Denmark</strong></td>
<td><strong>OECD</strong></td>
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</tbody>
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Sir Thomas More: Well, take me home.

Boatman: From Richmond to Chelsea, a penny half-penny
From Chelsea to Richmond a penny half-penny.
From Richmond to Chelsea, it’s a quiet float downstream,
from Chelsea to Richmond, it’s a hard pull upstream,
and it’s a penny half-penny either way.
Whoever makes the regulations doesn’t row a boat.