

Broadband Policy: Learning from International Experience

**Presentation to the FCC Workshop on International Lessons
August 18, 2009**

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1. **International comparisons are fraught with problems of measurement, specification, and interpretation, and thus prone to misuse.**
2. **Nevertheless, we can learn from the successes and failures of other countries.**
3. **One thing we do know is that the U.S. has a very high level of both wireline and wireless facilities-based competition and that this competition is serving us well.**

Potential Learning from International Comparisons

- **Benchmarking**
 - Are we “ahead” or “behind”?
- **Cross-sectional Natural Experiments**
 - “Other things equal,” how do various policies affect outcomes?
- **Longitudinal Analysis of Best Practices**
 - What policies are working, and not working?
- **Economic and Social Impacts**
 - What are the relationships between broadband and prosperity, education, health, political freedom, etc.

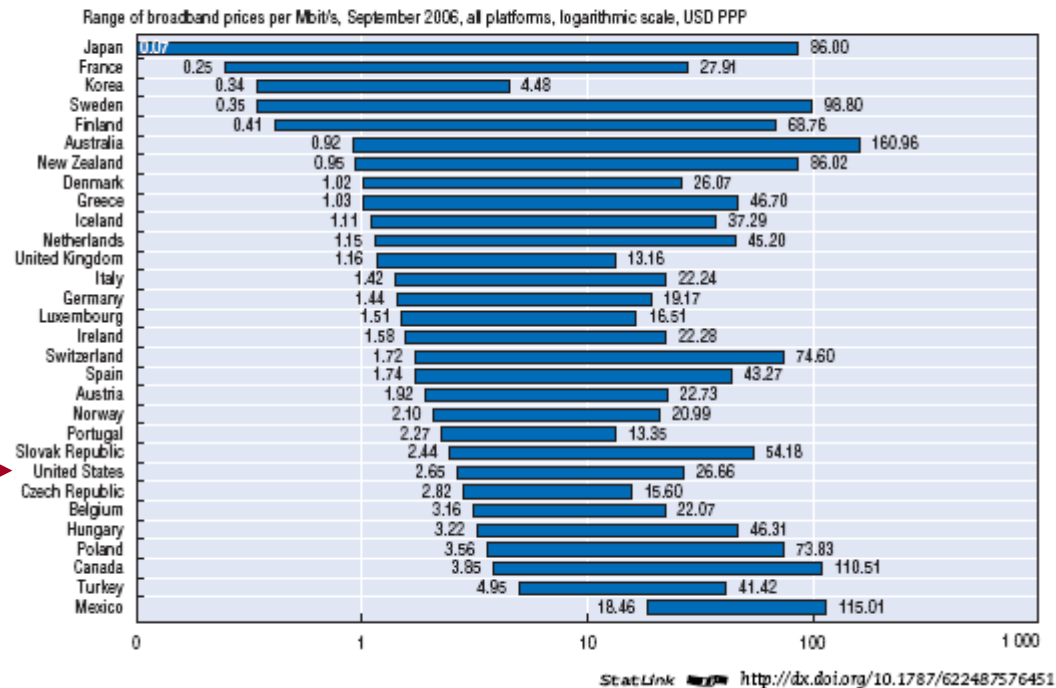
Methodological Challenges

- **Measurement:** Both outcomes and policies are difficult to quantify.
 - **Dependent variables:** Product heterogeneity makes it difficult to measure prices and quantities accurately.
 - **Policy variables:** Similarly, policies (e.g., unbundling) are complex and difficult to capture with “dummy” variables.
 - **Control variables:** How do we measure population density?
- **Specification:** Relationships between variables are not well understood.
 - Can we model pricing and other outcomes in multi-product industries?
 - What exogenous factors (e.g., culture, adoption curves) affect broadband adoption?
- **Interpretation**
 - Is higher cell phone penetration good or bad?
 - How about landline penetration?
 - How about broadband penetration?

Example 1: Measuring Broadband Prices

“The U.S. ranks 23rd in the world in broadband prices, between the Slovak Republic and the Czech Republic.”

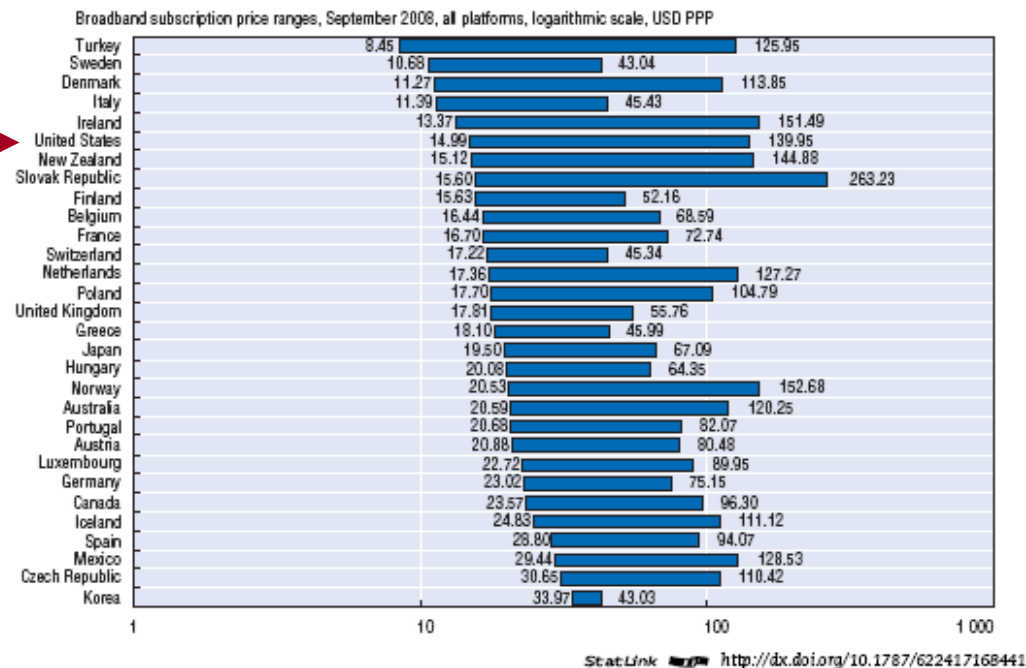
Figure 7.15. Range of broadband prices per megabits per second of advertised speed, September 2008



Example 1: Measuring Broadband Prices

“The U.S. has some of the lowest broadband prices in the world, far cheaper than countries like Korea and Japan.”

Figure 7.14. Range of broadband prices for a monthly subscription, September 2008



Example 2: Measuring Cell Phone Prices

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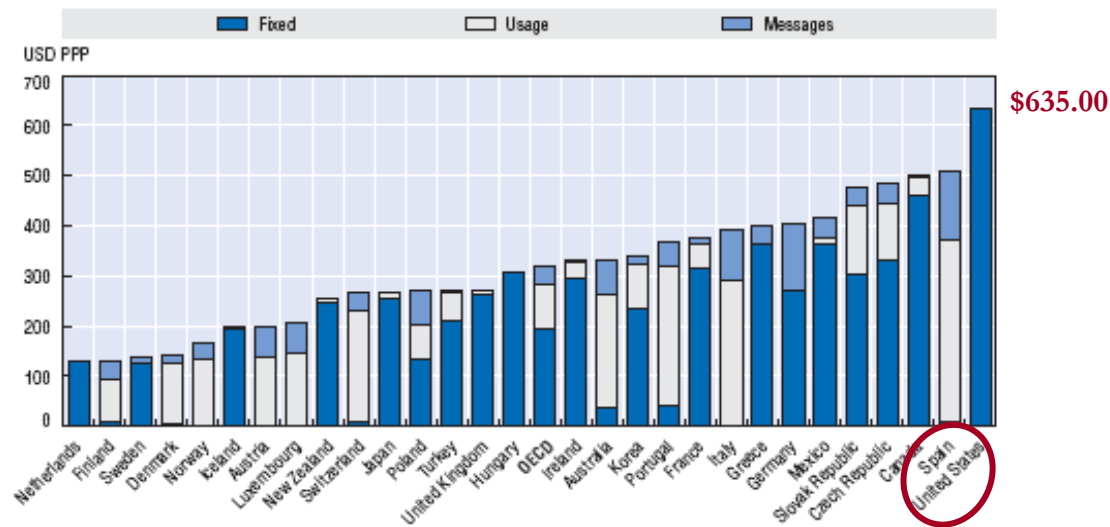
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Cellphone Users in U.S., Canada, Spain Pay Most

By SUSANA FERREIRA

Figure 7.10. OECD mobile medium-use basket, August 2008, tax included



Note: The existing mobile basket methodology does not include discounted or free calls to pre-selected phone numbers as part of "friends and family" or "preferred numbers" plans. The inclusion of these calls will be considered as part of a future update of the mobile basket methodology. Pre-paid plans are excluded.

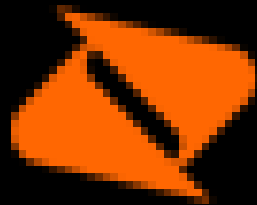
StatLink  <http://dx.doi.org/10.1787/622318882036>

Example 2: Measuring Cell Phone Prices

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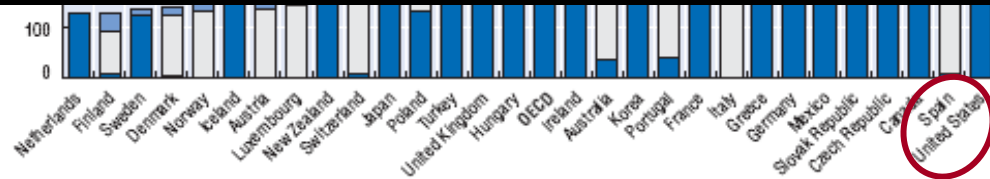
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Learning from International Comparisons

- **Benchmarking** – Simple-minded comparisons are not useful.
 - Are we “ahead” or “behind”?
- **Cross-sectional Natural Experiments** – Difficult to do correctly.
 - “Other things equal,” how do various policies affect outcomes?
- **Longitudinal Analysis of Best Practices** – Very valuable.
 - What policies are working, and not working?
- **Economic and Social Impacts** – Much more to be done.
 - What are the relationships between broadband and prosperity, education, health, political freedom, etc.

What We Know About the U.S. - Competition

- **More facilities-based wireline competition than virtually any other nation**
 - Roughly 80% of HHs can choose from multiple landline providers.
 - More than 90% of HHs can also choose from at least one 3G provider.
 - There are hundreds of WISPS and dozens of overbuilders.
- **Very high level of facilities-based wireless competition.**
 - Lowest two-firm concentration ratio in the OECD except UK.
 - Lowest HHI of any OECD nation.
 - Continuing entry – Clearwire, Cox, T-Mobile (broadband).

What We Know About the U.S. - Performance

“In the United States, where cable modem use is more prevalent than DSL lines, competition is leading to network upgrades. Nationwide fixed-line telecommunication operators such as AT&T and Verizon are actively deploying optical fibre networks to compete with cable TV operators’ multiple play services.”

OECD, 2008

What We Know About Infrastructure Competition

“[E]ffective infrastructure competition has been one of the main factors contributing to broadband rollout. Countries such as the Netherlands and Denmark, that have the highest broadband penetration levels in the world ahead of Korea and Japan, are those that have a real choice of infrastructures.”

Viviane Reding

January 2008

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