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International Lessons For Broadband Policy

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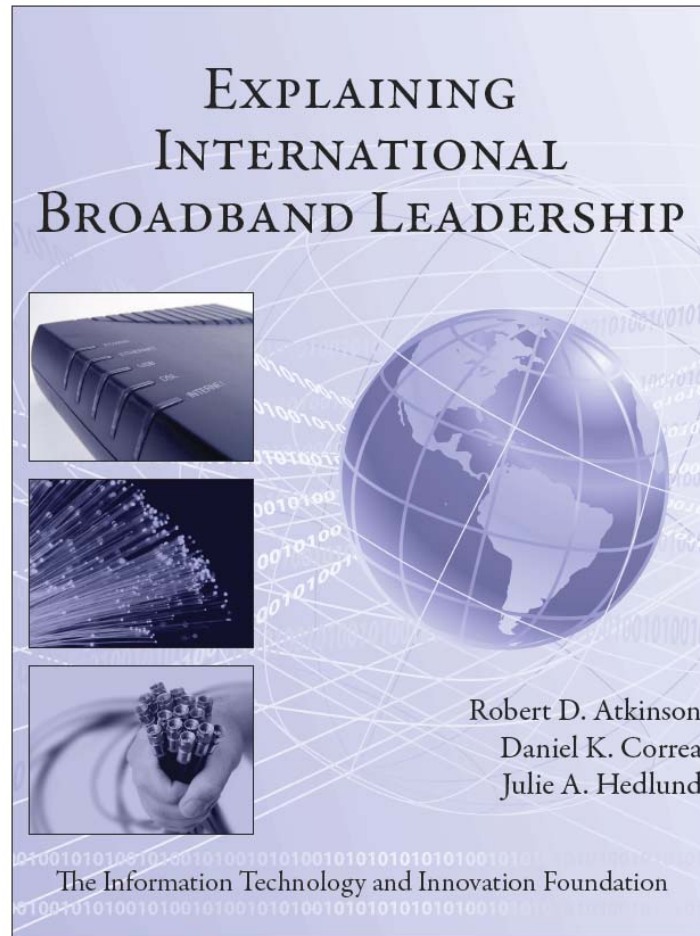


ITIF is public policy think tank committed to articulating and advancing a pro-productivity and pro-innovation policy agenda internationally, in Washington and in the states. ITIF focuses on:

- Broadband and telecommunications policy
- Digital transformation (E-commerce, e-government, e-health, etc.)
- IT and economic productivity
- Innovation and trade policy



■ “Explaining International Broadband Leadership”, May 2008.



■ The U.S. Broadband Ranking

- On a *per-household* basis the U.S. ranks 12th among the 30 OECD nations in broadband adoption.
- On a *per-household* basis the U.S. ranks 15th among the 30 OECD nations in a composite measure of adoption, speed, and price (\$ per mbps).
- OECD data do *not* measure broadband deployment.

■ What Lessons Can We Draw From Our Ranking?

- Drawing policy lessons is not straightforward because nations differ in very significant ways, including industry structure, demographics, economic position, and geography.
- One size doesn't fit all.

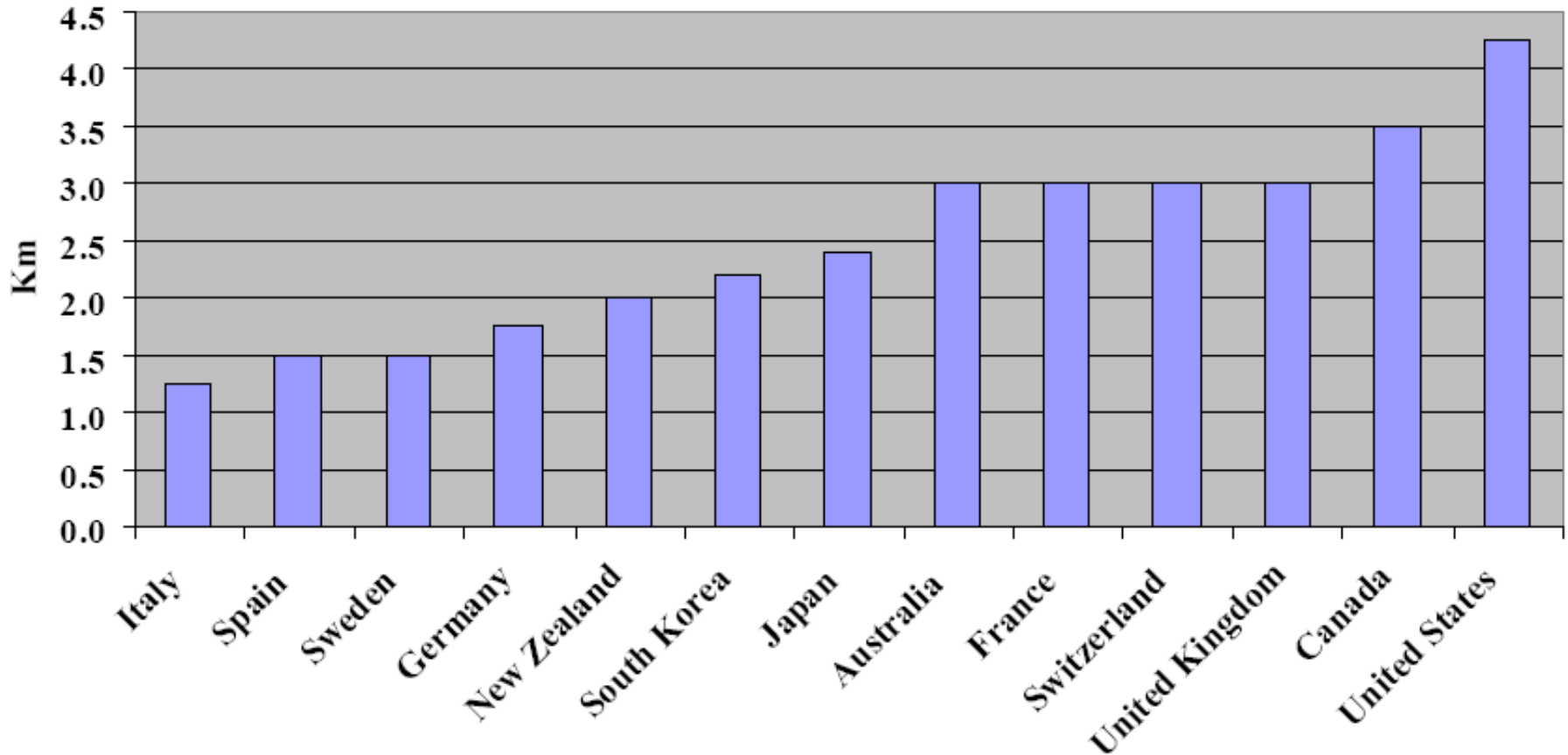
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■ Average Loop Lengths in Selected OECD Nations



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- Digital Literacy and Computer Adoption: U.S. has lower levels of PC ownership. Of 21 OECD nations where data were available, the U.S. ranks 11th in PC ownership. If the U.S. had the level of computer ownership as the average of the top 5 nations, it would rank 5th in broadband adoption, not 10th.

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- Industry Structure and Intermodal Competition:
 - Public ownership of incumbents vs. private
 - Primarily DSL or DSL and Cable.

The U.S. has Among the Highest Amount of Intermodal Competition (2007)

Nation	Telecom (DSL and Fiber)	Cable
Greece	100%	0%
Italy	100%	0%
Turkey	99%	1%
Iceland	98%	0%
France	95%	5%
Germany	95%	5%
Luxembourg	89%	11%
New Zealand	89%	7%
Japan	86%	14%
Finland	84%	13%
Norway	82%	15%
Australia	81%	15%
Spain	79%	21%
Sweden	79%	19%
United Kingdom	78%	22%

Nation	Telecom (DSL and Fiber)	Cable
Mexico	76%	21%
Slovak Republic	73%	12%
Ireland	72%	11%
Denmark	70%	28%
Poland	69%	30%
Switzerland	67%	30%
South Korea	65%	35%
Austria	62%	35%
Netherlands	62%	38%
Portugal	62%	37%
Belgium	61%	39%
Hungary	58%	40%
Canada	48%	52%
Czech Republic	47%	21%
United States	45%	52%

■ What Does This Mean?

- Our middling rank is *not* an indicator of a failure of regulation.
- It is an indicator of a failure of facilitation. Other nations have been much more active in facilitating the deployment and adoption of broadband through robust public-private partnerships.

■ Lessons on Deployment to Unserved Areas

■ Fund Deployment

- Sweden: Invested \$820 million to support deployment to areas with no broadband (70% in grants and 30% in tax credits). Incumbent TeliaSonera won 65% of projects. On a per-GDP basis, equivalent to \$30 billion in the U.S. As a result, less than 1% of households and businesses do not have access to wired broadband.
- Korea: funded backbone and rural deployment. On per-GDP basis, equivalent to \$4 billion per year for 10 years in the U.S.
- Japan: Funded 1/3 of the costs of fiber networks in unserved rural communities.

■ Lessons on Boosting Speed

- Provide incentives for network upgrades:
 - Korea: Low-interest loans to broadband providers to build high speed networks.
 - Japan: Accelerated depreciation for network investments, including fiber (over 90% of households served by fiber).
- Unbundling:
 - Japan: In order to give NTT an incentive to invest in FTTH, the Government did not require NTT to unbundle their fiber strands.

■ Lessons on Adoption

- Spur Digital Literacy and Broadband Demand
 - Korea: “10 Million People Internet Education Project”, provided free or subsidized computer training programs for groups like the elderly, military personnel, farmers, and housewives.
 - Germany: free consulting services for small and medium-sized businesses to promote broadband.

■ Lessons on Adoption

- Spur PC Adoption Through Schools and Students
 - Korea: government provided free computers to 50,000 low-income students with good grades, and free used PCs to the disabled and to those receiving public assistance; and through a post office program, leases computers to low-income families on a four-year lease with full support for broadband free for five years.
 - Sweden: provide subsidized personal computer purchases by letting companies provide them on a pre-tax basis to employees. Over 90% of households have a PC.
 - U.K.: E-Learning Foundation, which offers parents financing to lease laptops for four years with a delayed payment scheme that begins after 15 months.

Thank you!

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