“Stepping Stones” or Stumbling Blocks”? – Mandatory Network Sharing in Telecom

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September 28, 2006

From “Opening the Monopoly Bottleneck” to the “Stepping Stone Hypothesis”

- In many countries, the bottleneck was never a “monopoly” bottleneck, just an expensive one
- Unbundling and network sharing are regulatory interventions of last resort where there is not a second, third or fourth network providing access to the same households or establishments
- These network sharing arrangements were initially thought to be temporary –*i.e.,* ”stepping stones” –which could be abandoned once entrants built their own facilities
- Today, network sharing appears to be a permanent fixture in the EU, Japan, and Australia

Has the Policy Worked? Are the Net Benefits Positive?

- Presumably, the objective is to accelerate competition, which, in turn, should reduce prices and/or provide innovative new services

- If one believes the “stepping stone” hypothesis, the policy should also induce investment by entrants in new facilities as they step across the stones, climb the “ladder of investment”, or whatever…

- But any regulatory intervention of this magnitude has offsetting costs: it reduces the incentives of the regulated (ILEC) firm to invest, innovate, and deploy its own new services

- So, what is the evidence on these matters?

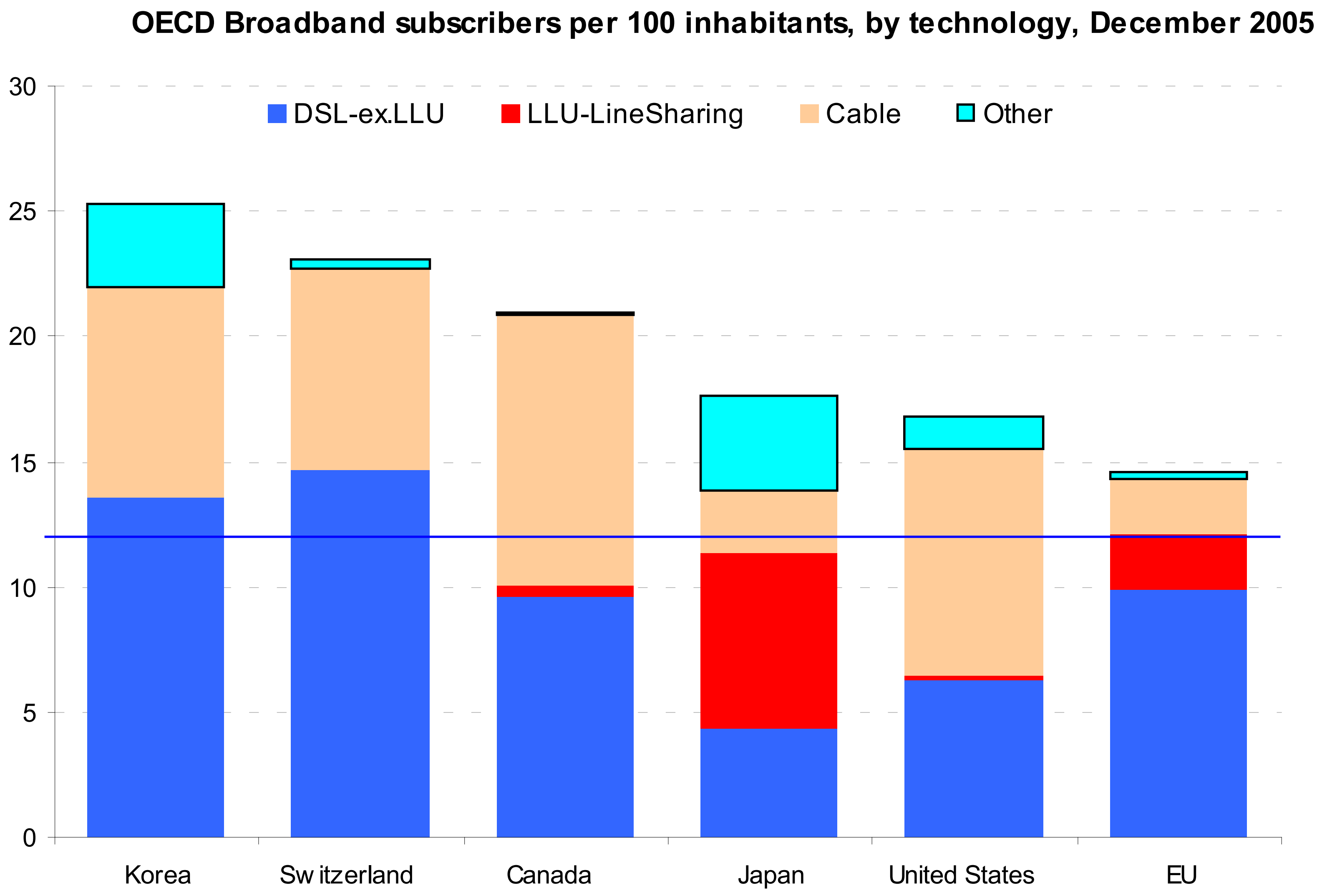
Did the Policy Help Create Competition in Narrowband Services?

- It was only tried in the United States and Canada for narrowband, voice services; clearly a failure in both countries, particularly in the U.S.
- U.S. CLECs reported capital expenditures of more than $60 billion
- The annual benefits from U.S. entry –not simply transfers from producers to consumers –would have to be $6 billion to $9 billion just to amortize this investment; more would be required to offset enormous marketing costs, etc.
- At best, 30 million CLEC customers saw their voice bills reduced by 15% or $66 per per subscriber year – a benefit to them of $2 billion per year, most of which is a transfer from ILECs.
- Most entrants failed. Publicly-traded survivors had a market cap of less than $4 billion and enterprise value of only $6 billion at end of 2005

Voice Competitors Did Not Climb the Ladder

Year-Qtr.	CLEC Lines	Cable On-Net	Non-Cable On-Net
		(million lines)	
2001-4	19.6	2.2	3.9
2002-2	21.6	2.6	3.6
2002-4	24.9	3.1	3.4
2003-2	27.0	3.1	3.3
2003-4	29.8	3.3	3.7
2004-2	32.0	3.3	4.2
2004-4	32.9	3.7	4.8
2005-2	33.9	4.6	4.5
2005-4	31.6	5.1	5.0

The Current Test of the Stepping Stone Hypothesis is in Broadband Services



But Few of the Companies in North America, Japan or Europe Are Climbing the Ladder of Investment

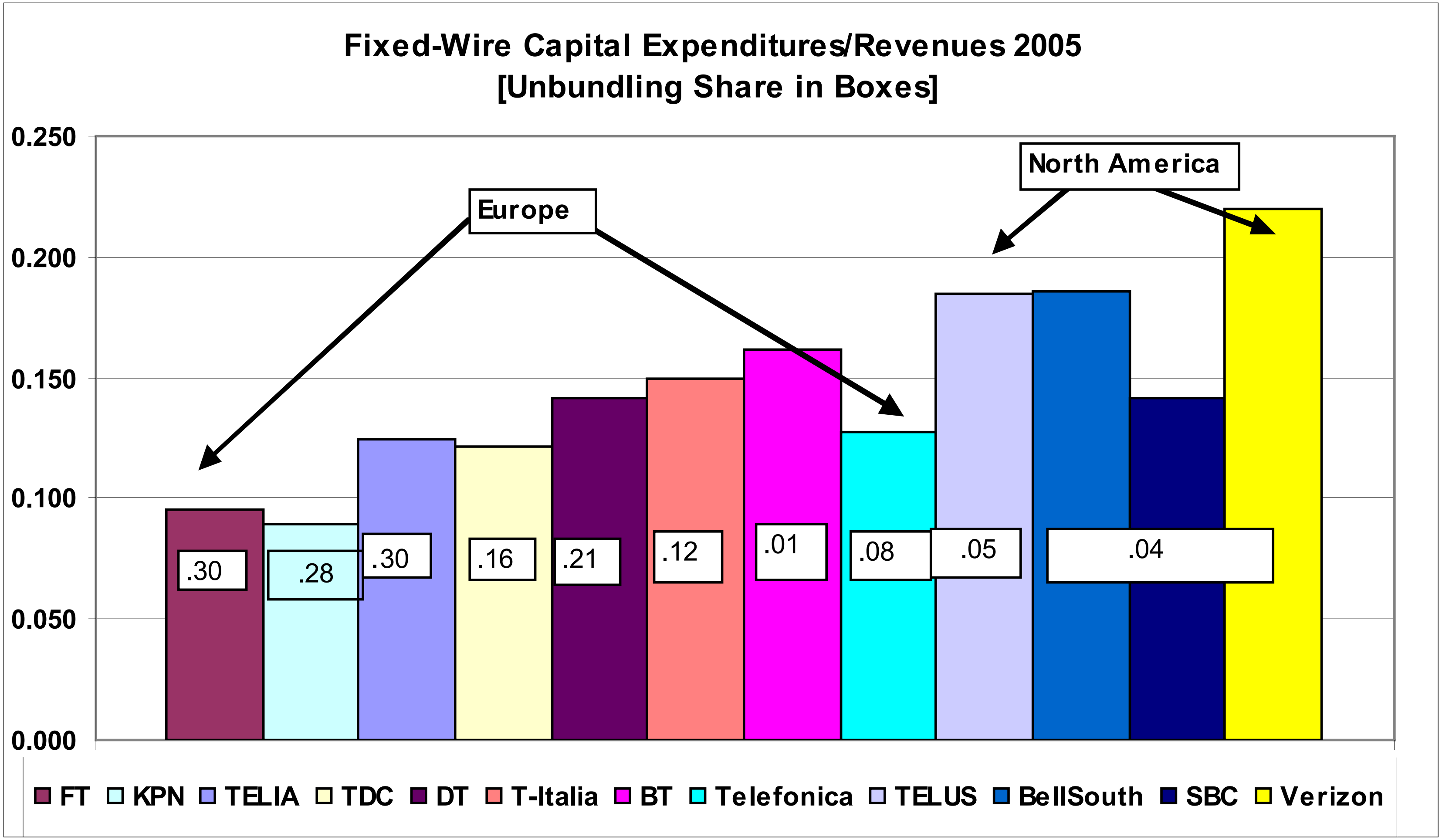
- The exceptions are Iliad (France), Wind (Italy), Tiscali (Italy), Talk America (Michigan)

- Competitors in Japan have two-thirds of DSL lines, but none has ascended the ladder of investment. Softbank-Yahoo BB is lobbying hard for lower-cost access to NTT's new fiber-optics connections

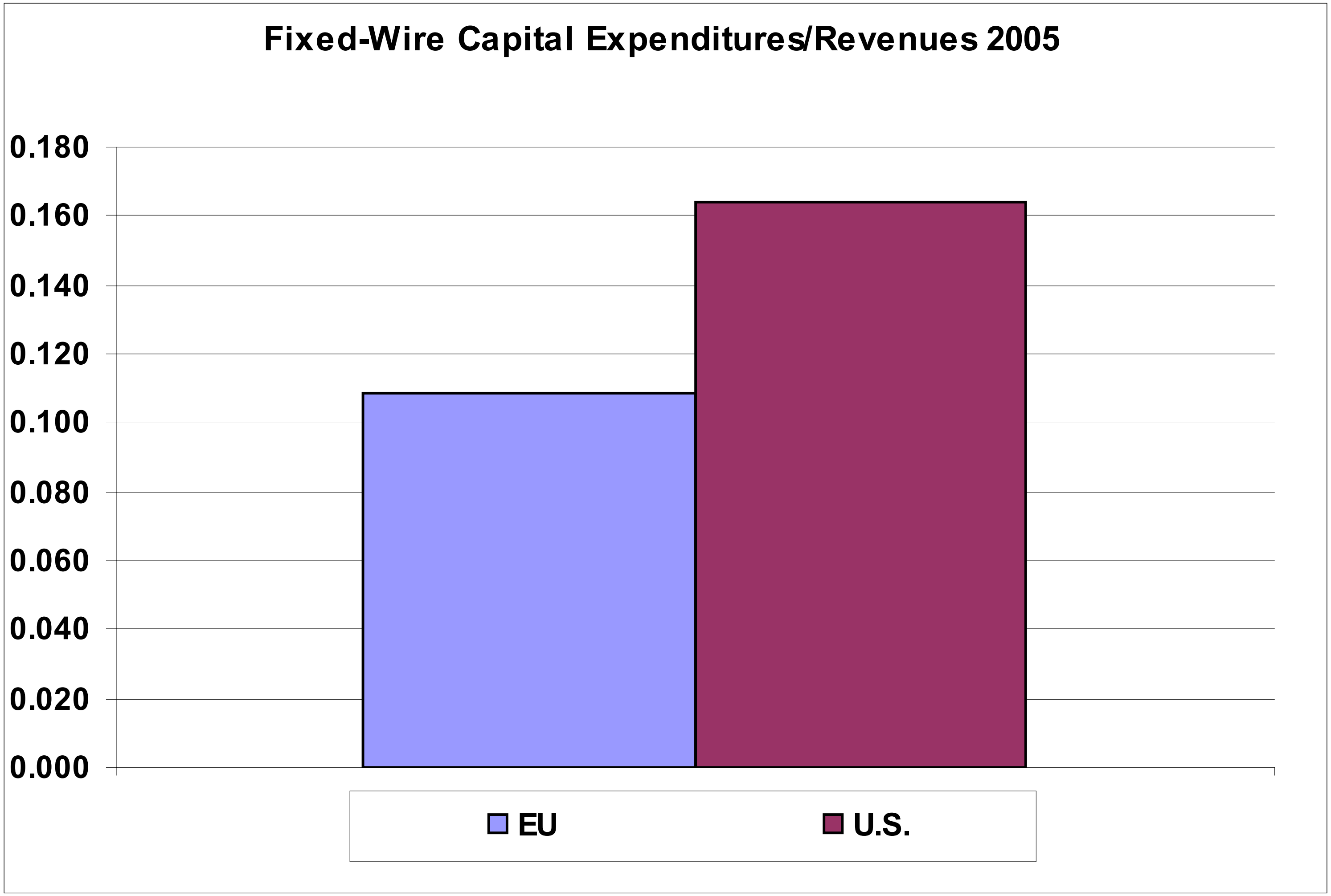
- No example (of which I am aware) of a company climbing to the top rung and building its own infrastructure after beginning with resale, LLU, or line sharing

- No empirical evidence that LLU or line-sharing has contributed to increased broadband penetration

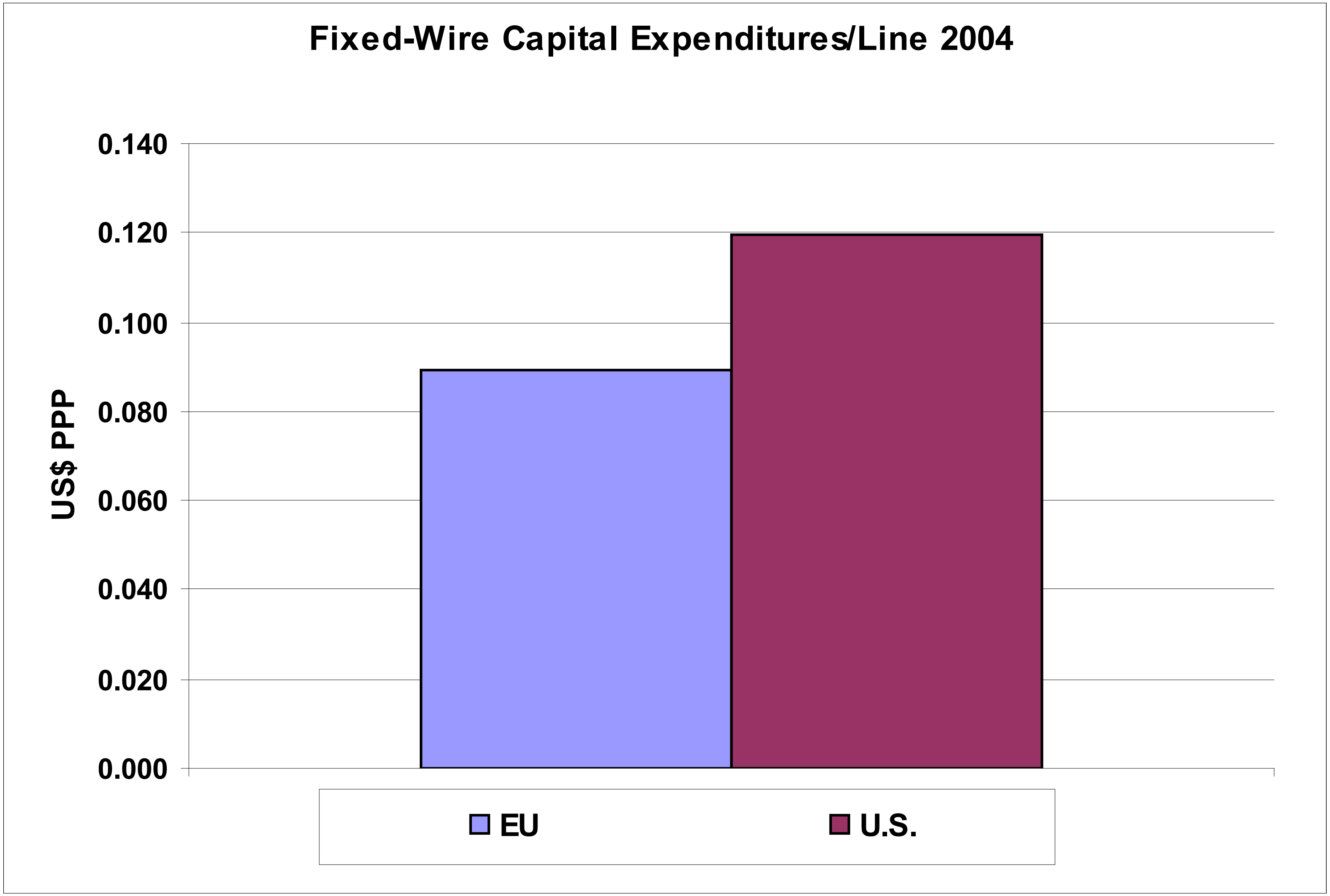
The Cost of LLU and Line Sharing: Less Network Investment



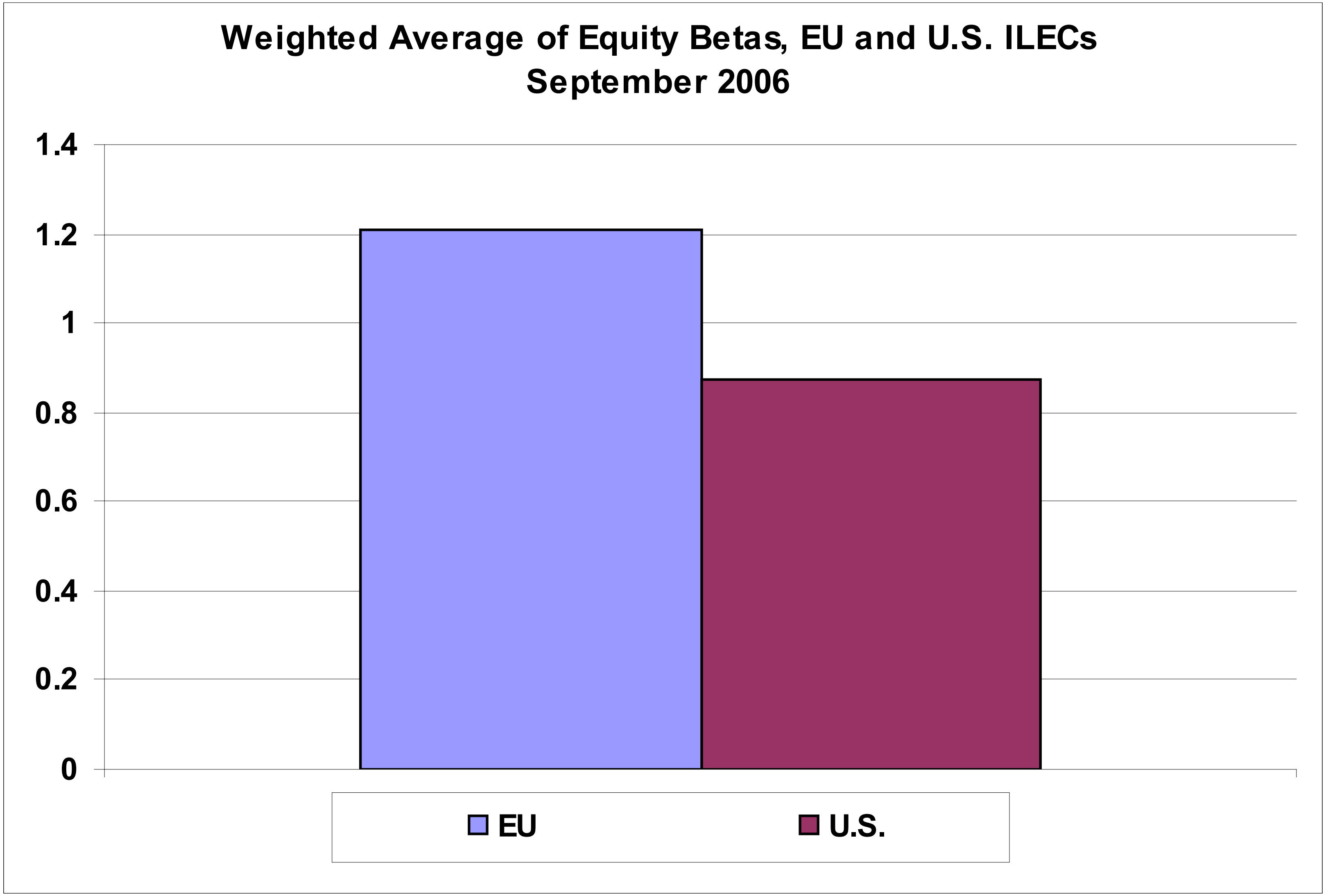
The More Regulated EU ILECs Are Lagging Behind U.S. Companies in Capital Expenditures



And in Capital Expenditures per Line



Perhaps Because Capital Markets See EU ILECs as More Risky



Conclusion

- The ladder of investment is missing the top rung
- No evidence that network sharing increases broadband penetration or otherwise creates benefits for consumers
- There is at least superficial evidence that network sharing has reduced network investment by the incumbents
- Nevertheless there is good news: these policies create rents for lawyers and economists everywhere!