

Subsidizing Universal Broadband through a Digital Advertising Services Fee

Hal Singer and Ted Tatos

Elevator Pitch

- Fast-growing base of digital advertising revenues would temper the “contribution factor” or tax rate (7.4% v. 14.7%)
- Likelihood that a fee on digital advertising platforms is passed through to consumers (via advertisers) is small.
 - Prices for digital advertisements are set via auction and thus are not under direct control of the advertising platforms, which could frustrate attempts to raise prices to advertisers.
 - Even with some pass-through, advertisers would not raise final product prices to their customers to the extent they perceive advertising expenses to be a fixed cost.
- In contrast, we found that the likelihood that a fee on wireline broadband service providers is passed through to broadband users is high, which would undermine the objective of subsidizing broadband.

Other Benefits

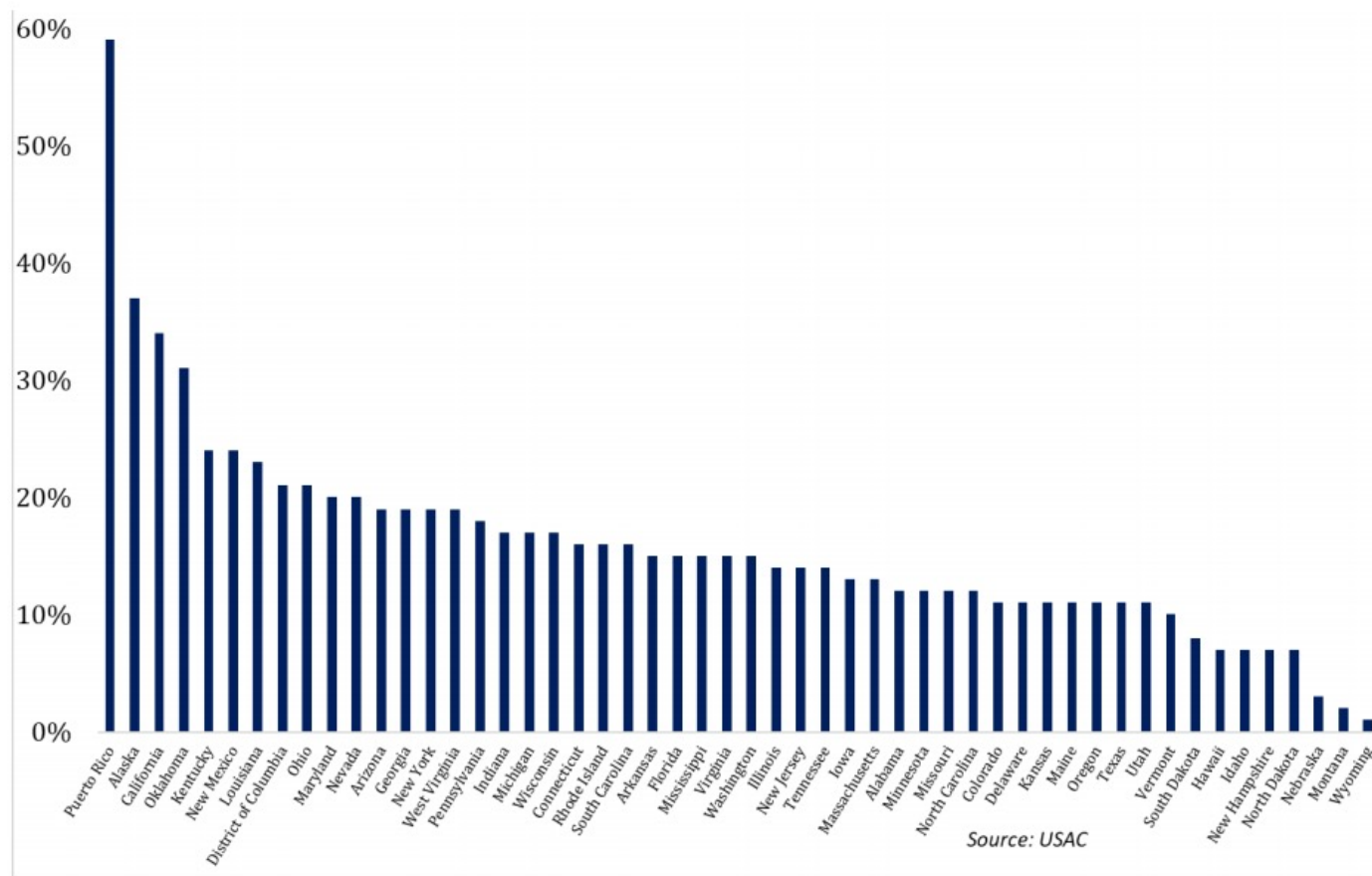
- Aligns interests of payor and beneficiary
 - Enlarges the user base for publisher content that draws ad revenues for leading digital ad networks
- Levies the fee on contributors to internet traffic load
 - Sandvine: Google and Facebook alone account for 20% of Internet traffic

Taxing Broadband Is Bad Public Policy

- It is bad public policy to surcharge the very service you wish to promote.
 - No one would argue that general R&D is a public good, under-provided by the private sector, and thus we should correct the market failure via a tax on general R&D
- BIAS does have a nonzero price elasticity of demand, and surcharges will repress its demand.
- Further, these repressions will be most significant for lower-middle income households that are neither wealthy, nor poor enough to be eligible for the Affordable Connectivity Program (ACP).

Adoption Depends on the Subsidy

FIGURE 1: ESTIMATED 2021 LIFELINE PARTICIPATION RATE, SELECTED STATES



- Only 6.2M of 33.2M Lifeline-eligible households avail themselves of the plan, an 18.7% adoption rate for Lifeline
- Adoption rate depends on the size of the subsidy, which will be greater for \$30 or \$50 compared to Lifeline's \$9.25

Demand Effects from Broadband Surcharge

TABLE 17: NET SUBSCRIBER GAIN AFTER PASS-THROUGH PRICE INCREASE

	Current	ISPs Pass Along Fees to Subscribers
Fixed Broadband Subscribers	105.82M	105.82M
Annual Subsidy		\$17.5B
ISP Total Revenues, 2020	\$117.9B	\$135.4B
Monthly Subscriber Cost	\$93	\$107
Price Increase		14.824%
Price Elasticity		-0.62
% Change in Subscribers		-9.2%
Total Subscriber Loss		-9.73M
Additional Subscribers Gained		36.12M
Percentage Gain Offset		-26.9%
Net Subscribers Gained		26.39M

Assuming 100% pass-through, the price increase would result in nearly ten million lost broadband subscribers!

Taxing Digital Advertising Results in a Smaller Contribution Factor

TABLE 12: ESTIMATED 2029 DIGITAL ADVERTISING CONTRIBUTION FACTORS - LIFELINE + RURAL HEALTHCARE + SCHOOLS/LIBRARIES

		Monthly Subsidy Per Household		
		\$30	\$40	\$50
Participation Rate	30%	2.6%	3.1%	3.6%
	40%	3.1%	3.7%	4.4%
	50%	3.6%	4.4%	5.2%
	60%	4.1%	5.1%	6.1%
	75%	4.8%	6.1%	7.3%
	90%	5.6%	7.1%	8.6%

TABLE 15: ESTIMATED 2029 LANDLINE ISP CONTRIBUTION FACTORS - LIFELINE + RURAL HEALTHCARE + SCHOOLS/LIBRARIES

		Monthly Subsidy Per Household		
		\$30	\$40	\$50
Participation Rate	30%	5.1%	6.1%	7.1%
	40%	6.1%	7.4%	8.8%
	50%	7.1%	8.8%	10.4%
	60%	8.1%	10.1%	12.1%
	75%	9.6%	12.1%	14.6%
	90%	11.1%	14.1%	17.0%

Best objection in Matthey Report

- FCC lacks authority to apply the USF to digital ad revenues
- While true, furthering the social welfare is a central function of the government, not the FCC. If levying a service fee on digital advertising revenues is the best public policy, as we have demonstrated, then Congress should authorize the FCC to aim the USF fee at digital advertising revenues.
- Good governance often requires Congressional intervention
 - Title II debate for net neutrality

Other problems with Matthey Report

- The sub-4% contribution projection assumes that all BIAS lines will be surcharged.
- Lines receiving Lifeline support have never been allowed to be surcharged for USF in the past, and it is likely that both Lifeline and Emergency Broadband Benefit/ACP-supported BIAS lines will not be allowed to be surcharged in the future.
- Because USF surcharges will only be allowed to be placed on nonsubsidized BIAS lines, the percent surcharge on these lines will need to be far above 4%.

Other problems with Matthey Report

- The sub-4% contribution projection assumes that BIAS revenues will grow in concert with USF program demand.
- Indeed, the Matthey Report's illustration assumes that BIAS revenues will grow at 5%/year, indefinitely.
- This is contrary to recent experience:
 - Fixed broadband prices are flat.
 - Because the market for fixed broadband is close to saturation (i.e., households only need one fixed line for the entire household and take-up already exceeds 80%), not clear where growth comes from.
 - Mobile service revenues peaked several years ago and are now flat to falling.

Other problems with Matthey Report

- The sub-4% contribution projection also relies on an assumption that USF program costs will be static at \$8 billion/year.
- This figure is below recent experience, and would permit no expansion in USF program costs.
- Indeed, once Congressional funding for the ACP runs out (likely to occur within 3 years), if the USF must assume its cost, the fund could easily double in size to above \$16 billion/year. This, of course, would double or more the required funding surcharge.