PERSPECTIVES

PHOENIX CENTER FOR ADVANCED LEGAL & ECONOMIC PUBLIC POLICY STUDIES

Substantial Profits in the Broadband Ecosystem: A Look at the Evidence

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Introduction

"Data-driven decisionmaking," is now a recurrent theme in the modern communications policy debate. While this focus on data is welcome, for data to be useful they must be analyzed using proper techniques. This translation of data into information requires a requisite set of knowledge and skills and, ideally, should be motivated by theory. Such skills are not ubiquitously held, and theory is often ignored. Unskilled data analysis may result in significant judgmental errors.²

In effect, the call for "data driven" analysis is mostly an expression of dissatisfaction with earlier decisions, presumably made "unenlightened" decisionmakers respect for evidence. Less cynically, the "datadriven" mentality reflects distaste for strong conclusions made without any reference to supporting evidence, which is unfortunately not uncommon in public policy debates across all While it is not always possible to provide evidence for particular theoretical claims, where evidence can be provided it seems imperative to do so. Also, the more particular the conclusion and the stronger one adheres to and peddles it, the more necessary is supporting evidence. Certainly, in the sometimes rapid-fire environment of public policy, the "perfect" piece of evidence may be elusive. Nevertheless, presentation of some evidence-with relevant caveats—is better than presenting no evidence at all. When evidence is available at the fingertips, proper "data-driven" etiquette requires that such data accompany any claim or policy proposal.

Consider, as an example of poor "data-driven" etiquette, recent claims made by Free Press before Communications Federal Commission in the Open Internet proceeding.3 Free Press claims that "major phone and cable currently earning companies are profits."4 Yet, Free Press provides no evidence to support the statement despite the fact that if its allegation was true, such evidence should be readily available. Free Press also claims that "companies like AT&T and Comcast ... make substantial profits" and other descriptors such as "soaring profits." But, again, it provides no evidence to support its claims.

In this PERSPECTIVE, we look for data that may confirm or deny Free Press' allegations of "record profits," "substantial profits," and "soaring profits." The evidence fails to support these assertions. With regard to the claim of "substantial profits," the data show that the profitability of the larger Broadband Service Providers (BSPs) is generally equal to or below the average of S&P 500 firms. Thus, "typical" or "below average" is more accurate than "substantial" as a description of these profits. Some large BSPs have very low, and even

negative, profitability. Content firms like Google and EBay are substantially more profitable than all large BSPs, implying that the BSPs are not benefiting as much as others are from the surge in broadband adoption and use. By standard measures of profitability, even traditionally low-margin retailers like Wal-Mart are more profitable than the BSPs.

Larger broadband service providers like AT&T, Verizon, and Comcast have profitability ratios typically at or below the average of S&P 500 firms. Other large BSPs, such as Sprint-Nextel, Qwest, and Time Warner Cable, have profits well below the S&P 500 average.

As for "record" or "soaring profits," the data show that 2009 profitability ratios are largely typical of recent profitability for the larger BSPs, being relatively stable over the past five years. In contradiction to the rhetoric, none of the evidence suggests "record" or "soaring" profits.

Measuring Profits

There are many measures of profits and profitability. In this PERSPECTIVE, we simply use those measures of profitability most commonly recommended by Finance textbooks. Calculations of these measures of profitability are also provided by many online financial resources. As such, both the choice of profitability measures and the calculation of profitability are exogenous to this PERSPECTIVE.⁶

Brealey and Myers, in their widely used textbook *Principles of Corporate Finance*, provide three primary measures of profitability: (1) net profit margin ("NPM"); (2) return on equity ("ROE"); and (3) return on assets ("ROA").⁷ These same three profitability ratios are

recommended in Ross, et al. (2001), where they note that these are "the best known and most widely used of all financial ratios." The three measures of profit—NPM, ROE, and ROA—are defined here respectively as after-tax Net Income divided by Total Sales, Average Total Equity, and Average Total Assets.

These financial ratios are reported by many established online financial resources. We use Reuters.com, which reports all three ratios for the last year, provides a 5-year average of these ratios, and provides an average of each ratio for the firms making up the S&P 500.¹⁰ We make no modifications to these publicly-available data.¹¹

A Review of the Evidence

In Table 1, the three profitability ratios are provided for major BSPs, including AT&T ("T"), Verizon ("VZ"), Sprint ("S"), Qwest ("Q"), Comcast ("CMCSA") and Time Warner Cable ("TWC"). The ratios are computed using 2009 data and an average for the last five years. In the first column of the table are the profitability ratios representing an average for the firm in the S&P 500 ("SP500").

Table 1. Profitability Ratios (%) – BSPs								
	SP500	T	VZ	S				
NPM	10.2	10.4	9.6	-7.6				
NPM 5-Yr	12.2	10.6	9.9	-18.5				
ROE	13.5	12.7	8.8	-12.8				
ROE 5-Yr	9.9	10.9	12.3	-20.2				
ROA	5.0	4.8	4.8	-4.3				
ROA 5-Yr	4.5	4.4	4.8	-8.9				
	_	Q	CMCSA	TWC				
NPM	_	5.4	10.2	6.1				
NPM 5-Yr		6.0	8.0	-5.0				
ROE			8.8	8.3				
ROE 5-Yr			5.8	-3.0				
ROA		3.3	3.2	2.4				
ROA 5-Yr		3.3	2.2	-1.4				
Source. www.reuters.com.								

There are a number of important facts indicated in this table. First, In the case of Sprint-Nextel and Time Warner, and in large part Qwest, profitability is well below the typical firm. From this data, it is clear that any general claim of substantial profits for large providers of broadband service is inconsistent with the facts. Second, the profitability of the other large BSPs is fairly typical of, if not slightly below, American industry generally (as measured by the S&P 500). For the 5-year figures, which are probably most appropriate for such an analysis since they cover a longer period of time and are less influenced by short-term fluctuations and economic and accounting anomalies, the NPMs of the other four BSP's are slightly below average. AT&T has experienced a fairly typical 5-Year ROE and ROA for American industry, while Verizon's ROE is slightly above average. Comcast has, over the past five years, experienced below average NPM, ROE, and ROA, and not by a small degree (about twothirds the average). Unless Free Press intended to indict all of American industry "substantially profitable," then the evidence does not indicate that BSPs are "substantially" profitable.

Wal-Mart Colgateand Both Palmolive have much higher profits than BSPs (with the exception of **NPM** for Wal-Mart). Selling consumers staples and toothpaste appears to be more profitable than them broadband selling connections.

Second, as for soaring and record profits, we observe no real pattern of rising profitability across the BSPs. Both NPM and ROA for the latest year are not materially different from the 5-Year averages, implying relatively stable profitability. Sprint-Nextel's condition is improving, but profits remain negative. A slight rise in ROE for AT&T and Comcast is observed,

but their ROE remains below the S&P 500 average. Verizon's ROE, in contrast, has recently declined. A review of Table 1 certainly does not support "surging" or "record" profitability.

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Overall, Table 1 indicates a lack of substantial profits being made in the provision of underlying broadband connectivity (and associated services). For AT&T, Verizon, and Comcast, profitability is rather typical of American firms, with Comcast's ROE and ROA maybe slightly below average. For some BSPs, profits are very low. The evidence certainly belies any claim, as made by the Free Press, of "substantial", "record", or "soaring" profits by broadband providers.

Table 2. Profitability Ratios (%)								
	SP500	GOOG	EBAY	WMT	CL			
NPM	10.2	28.3	27.4	3.7	15.6			
NPM 5-Yr	12.2	24.7	19.0	3.6	13.1			
ROE	13.5	20.7	19.2	21.2	96.4			
ROE 5-Yr	9.9	20.1	12.5	21.1	105.9			
ROA	5.0	18.5	14.1	8.9	22.7			
ROA 5-Yr	4.5	18.1	9.7	8.7	18.8			
Source. www.reuters.com.								

In Table 2, we present the same profitability ratios for some non-BSPs. Included are content providers Google ("GOOG") and EBay ("EBAY"). We present the results for these firms since, in the current policy debate, some contend

that Network Neutrality regulation is required to shift revenues and profits from BSPs to content providers.¹³ Profit ratios for Wal-Mart ("WMT") and Colgate-Palmolive ("CL") are also provided, just to see how other well-known firms in competitive industries fare in terms of relative profitability.

The evidence shows that BSP profitability is fairly typical of American industry, if not below average. Based on available evidence, regulatory intervention based on substantial profitability by large BSPs has no basis in fact.

As seen in Table 2, the profitability of both Google and EBay are well above average. Their NPMs are about 2-3 times and their ROAs are 2-4 times the S&P 500. ROEs are likewise well above average. Moreover, the larger content providers are far more profitable than the larger BSPs, whose profits are comparable to, or slightly below, the average of S&P 500 firms. In contrast to the BSPs, the profitability of both firms is by most measures notably higher than is the 5-Year average, indicating rising profitability.

Even Wal-Mart and Colgate-Palmolive have much higher profits than BSPs (with the exception of NPM for Wal-Mart). Selling consumers staples and toothpaste appears to be more profitable than selling them broadband connections. This evidence conflicts with the Free Press claim of substantial profits from providing broadband services.

Conclusions

Data-driven decisionmaking calls for evidentiary support when possible. In this PERSPECTIVE, we consider the claims of the media reform group, Free Press, regarding BSP profitability. Using publicly available data and standard measures of profitability, we find no evidence to support the Free Press' claim of "substantial", "record", and "soaring" profits. Larger broadband service providers like AT&T, Verizon, and Comcast have profitability ratios typically at or below the average of S&P 500 firms. Other large BSPs, such as Sprint-Nextel, Qwest, and Time Warner Cable, have profits well below the S&P 500 average. Content providers, in contrast, are far more profitable than the average of the S&P 500 group, earning profit rates well above those of broadband providers.

Good policy must be rooted in sound evidence. While claims of "substantial" and "record" profits may satisfy a need for inflammatory rhetoric, data-driven decisionmaking turns on the evidence. The evidence shows that BSP profitability is fairly typical of American industry, if not below average. Based on available evidence, regulatory intervention based on substantial profitability by large BSPs has no basis in fact.

NOTES:

- * Dr. George Ford is Chief Economist of the Phoenix Center for Advanced Legal and Economic Public Policy Studies. The views expressed in this Perspective do not represent the views of the Phoenix Center, its Adjunct Follows, or any if its individual Editorial Advisory Board Members.
- ‡ Lawrence J. Spiwak is President of the Phoenix Center.
- FCC Chairman Julius Genachowski frequently calls for data-driven analysis. See FCC July 15, 2009 Press Release: Harvard's Berkman Center to Conduct Independent Review of Broadband Studies to Assist FCC (available at: http://www.fcc.gov/Daily_Releases/Daily_Business/2009/db0714/DOC-291986A1.pdf). However, the Chairman's persistent use of the OECD's per-capita broadband rankings brings into question his commitment to "data-driven" and "enlightened" decisionmaking. See, e.g., February 24, 2010 Prepared Remarks of FCC Chairman Julius Genachowski, Mobile Broadband: A 21st Century Plan for U.S. Competitiveness, Innovation and Job Creation (available http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296490A1.pdf). For a review of the numerous analytical flaws of OECD rankings, see, e.g., G.S. Ford, T.M. Koutsky and L. J. Spiwak, The Broadband Performance Index: A Policy-Relevant Method of Comparing Broadband Adoption Among Countries, PHOENIX CENTER POLICY PAPER NO. 29 (July 2007) (available at: http://www.phoenix-center.org/pcpp/PCPP29Final.pdf); G.S. Ford, T.M. Koutsky and L.J. Spiwak, The Broadband Efficiency Index: What Really Drives Broadband Adoption Across the OECD? PHOENIX CENTER POLICY PAPER NO. 33 (May 2008) (available at: http://www.phoenix-center.org/pcpp/PCPP33Final.pdf); G.S. Ford, PHOENIX CENTER PERSPECTIVES No. 09-01: Normalizing Broadband Connections (May 12, 2009) (available at: http://www.phoenixcenter.org/perspectives/Perspective09-01Final.pdf); L.J. Spiwak, OECD Research Faulty, Washington Times (October 11, 2009) (available at: http://www.washingtontimes.com/news/2009/oct/11/oecd-research-faulty).
- G.S. Ford, University of Florida Study Shows Only Winners from Network Neutrality Regulation to be Content Providers, Consumers Lose, Phoenix Center Perspective No. 07-01 (March 14, 2007)(available at: http://www.phoenix-center.org/perspectives/Perspective07-01Final.pdf); G.S. Ford, Be Careful What You Ask For: A Comment on the OECD's Mobile Price Metrics, Phoenix Center Perspective No. 09-03 (September 16, 2009)(available at: http://www.phoenix-center.org/perspectives/Perspective09-03Final.pdf); G.S. Ford, Econometric Analysis of Broadband Subscriptions: A Note on Specification, Phoenix Center Perspective No. 09-02 (May 12, 2009)(available at: http://www.phoenix-center.org/perspectives/Perspective09-02Final.pdf); G.S. Ford, Whoops! Berkman Study Shows "Open Access" Reduces Broadband Consumption, Phoenix Center Perspective No. 09-05 (November 12, 2009)(available at: http://www.phoenix-center.org/perspective09-05Final.pdf).
- ³ *In re Preserving the Open Internet,* GN Docket No. 09-191, Notice of Proposed Rulemaking, 24 FCC Rcd 13,064, FCC 09-03 (rel. Oct. 22, 2009) ("Open Internet NPRM").
- ⁴ Free Press Comments, GN Docket No. 09-191 (Jan. 14, 2010), at 67-68; 70 (available at http://fjallfoss.fcc.gov/ecfs/document/view?id=7020378751).
- ⁵ *Id.* at 10, 67.
- ⁶ This exogenous determination of profitability measures and calculations avoids the accusation of selectivity on our behalf.
- 7 R. Brealey and S. Myers, Principles of Corporate Finance (2000) at 828-9.
- 8 S.A. Ross, R.W. Westerfield, and B.D. Jordan, Fundamentals of Corporate Finance (2001) at 66.
- These ratios have alternate formulations, but these particular calculations match the reported figures from our data source.
- www.reuters.com.
- All three financial ratios are measures of accounting profitability. Notably, with regard to market power, economic profits are theoretically more relevant. However, the claims we evaluate here of "record, substantial, and soaring profits" have no direct nexus to economic profit nor involve an econometrically-controlled analysis of inter-industry data.

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NOTES CONTINUED:

Consequently, we consider accounting profits and invoke the standard caveats on their measurement of market power (which we do not address). See F. Fisher and J. McGowan, On the Misuse of Accounting Rates of Return to Infer Monopoly Profits, 73 American Economic Review 82-97 (1983); W. F. Long and D. J. Ravenscraft, The Misuses of Accounting Rates of Return: Comment, 74 American Economic Review 494, 495 (1984); S. Martin, The Misuses of Accounting Rates of Return: Comment, 74 American Economic Review 501-6 (1984).

- ¹² These firms are included in the S&P 500 and listed in formal groupings as either providers of "Telecommunications Services" (T, VZ, S, Q) or "Consumer Discretionary" (CMCSA, TWC).
- ¹³ See, e.g., I. Chettiar and J. Holladay, Free to Invest: The Economic Benefits of Preserving Net Neutrality, Institute for Policy Integrity, New York University School of Law, Report No. 4 (January 2010) at viii (available at: http://www.policyintegrity.org/documents/Free_to_Invest.pdf).



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