New Study Quantifies Potential Impact of Auction Restrictions on Revenues

Robert J. Shapiro, Douglas Holtz-Eakin, Coleman Bazelon

Washington, D.C. – The Center for Business and Public Policy at Georgetown University's McDonough School of Business released a new study today on the potential impact of the Federal Communications Commission's (FCC) spectrum incentive auction rules if the Commission bans or limits participation of qualified auction bidders.

In the study, titled "The Economic Implications of Restricting Spectrum Purchases in the Incentive Auctions," economists Robert J. Shapiro, Douglas Holtz-Eakin, and Coleman Bazelon present a data-driven analysis that demonstrates how auction bidding restrictions would cut auction revenues, threaten the Congressional mandate to fully fund a nationwide public safety network, limit the amount of broadcast spectrum available for wireless use, and put upward pressure on the price of mobile broadband services as costs are elevated by restricting efficient firms' auction participation.

"The FCC's mission to advance the efficient use of spectrum will require a broad inquiry as it considers the design of rules for the upcoming spectrum auction. We are hopeful that the FCC will indeed incorporate the information provided in the study we are releasing today as the Commission works to fashion the design of the auction," said John Mayo a professor of economics, business, and public policy at Georgetown McDonough and executive director of the Georgetown Center for Business and Public Policy. "In particular, the analysis included in the study points to a number of costs associated with limiting participation in the auction. These empirical findings should give pause to any headlong move to handicap some firms' participation in the auction."

The FCC currently is developing a two-part incentive auction framework that enables television broadcasters to voluntarily relinquish some of their spectrum licenses so they can be resold to wireless service providers. The auctions could result in as much as 120 MHz of spectrum transferred from broadcasters, depending on the amount broadcasters' offer and whether the forward auction generates enough proceeds to pay for it. The new study analyzes two potential scenarios – the impact of a complete ban on bidding by the largest wireless carriers and the outcome of permitting these entities to purchase all 120 MHz. In looking at the entire range of potential action, the study provides a mechanism to evaluate the impact of varying restrictions. For example, if the FCC restricts, but does not ban, bidding by the larger carriers, the impact on costs and employment would be proportionate to the extent of the restrictions.

In the study, Holtz-Eakin and Bazelon estimate that bidding rules that bar the participation of the two most efficient wireless providers, Verizon Wireless and

AT&T, in the auction process could reduce auction revenues by about 40 percent – lowering federal auction proceeds from as much as $31 billion to approximately $19 billion. This in turn would likely reduce the amount of spectrum acquired from broadcasters and made available for wireless broadband services.

The authors warn that lower auction revenues of $19 billion could result in a funding shortfall to support the build out of the nationwide interoperable, high-speed public safety broadband network—FirstNet—mandated by Congress in 2012. In particular, they note that with the estimated $7 billion needed from the auction to deploy the public safety network, coupled with the estimated $2 billion needed for re-packing costs, just $10 billion of the potential $19 billion in auction proceeds would remain for purchasing the broadcasters' spectrum. That likely would not be sufficient to secure the full amount made available by the broadcasters. The authors' analysis shows that by permitting all four national carriers to participate without restrictions would generate more revenue, estimating that there could be as much as $22 billion available for the purchase of broadcaster spectrum.

"The first and foremost impact of a significant reduction in forward auction revenues would be the diminished amount of spectrum reallocated from television to wireless broadband uses," said Holtz-Eakin and Bazelon. "The inability to pay for all available spectrum would trim total revenue further and risk creating a potential vicious circle of declining revenues and even fewer frequencies reallocated, making the single most important spectrum auction in FCC history a failure."

In Shapiro's analysis, he finds that restricting the largest carriers from access to additional spectrum at auction would undermine the effort to address the nation's spectrum crunch by excluding the most efficient providers. According to the paper, this "would increase the industry's effective spectrum deficit by as much as 46 MHz."

Shapiro notes in the study that barring large wireless carriers from acquiring additional spectrum to address their capacity needs would force them to deploy other, less efficient solutions that would generate additional costs to be ultimately borne by consumers. These cost increases would likely raise consumer wireless bills by about 9 percent a month and slow the adoption of 4G wireless broadband by some 7 million subscribers by 2017. A slower transition to 4G technologies also would hinder employment growth, resulting in cumulative job losses and lower job gains of more than 118,000 by 2017.

"While advocates argue that spectrum caps can promote greater competition, any such speculative benefits of enhanced retail competition must be weighed against the very real consequence of reduced efficiency of spectrum use, higher supply costs, delayed adoption of 4G technologies and harmful reductions in employment relative to an unrestricted auction," Mayo added.

To access the full paper, visit http://cbpp.georgetown.edu [1].

About the Authors

Robert J. Shapiro is co-founder and chairman of Sonecon LLC, and is a senior fellow at the Georgetown Center for Business and Public Policy. He is an adviser to the International Monetary Fund, director of the Globalization Center at NDN, and chairman of the U.S. Climate Task Force. From 1997 to 2001, Shapiro served as U.S. Undersecretary of Commerce for Economic Affairs. He also was the principal economic adviser to the Clinton, Gore, and Kerry presidential campaigns.

Douglas Holtz-Eakin is the president of the American Action Forum and most recently was a commissioner on the Congressionally chartered Financial Crisis Inquiry Commission. He previously has served as the chief economist of the President's Council of Economic Advisers, where he also had served as a senior staff economist. He also served as the 6th director of the non-partisan Congressional Budget Office (CBO), which provides budgetary and policy analysis to the U.S. Congress.

Coleman Bazelon is a principal at The Brattle Group, where he specializes in regulation and strategy in the wireless, wireline, and video sectors. Prior to joining Brattle, Bazelon was a vice president with Analysis Group, an economic and strategy consulting firm. He also served as a principal analyst in the CBO Microeconomic and Financial Studies Division, where he researched reforms of radio spectrum management; estimated the budgetary and private sector impacts of spectrum-related legislative proposals; and advised on auction design and privatization issues for all research at the CBO.

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[1] http://cbpp.georgetown.edu