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No Picking Favorites: The Proper Approach to the Upcoming Incentive Auction

by

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FCC Commissioner Jessica Rosenworcel recently appeared on C-SPAN's weekly series, "The Communicators." She spoke at length about the substantial progress and growth the digital economy has experienced in recent years. She also weighed in on the issues she predicts will be most central to the Commission's agenda through the fall.

One issue that Commissioner Rosenworcel discussed was the execution of the upcoming spectrum incentive auctions, which the Commission must complete in 2014.

C-SPAN host Peter Slen asked Commissioner Rosenworcel whether the upcoming auctions will have set-asides for smaller competitors or whether it will be a wide-open auction. *Communications Daily* Executive Senior Editor Howard Buskirk followed up by asking whether she foresees the FCC imposing bidding restrictions that would keep the two largest carriers, AT&T and Verizon Wireless, "from buying most of the spectrum."

Commissioner Rosenworcel responded:

> It is my hope in the auctions that we will first and foremost follow the law. The Communications Act requires us to make sure we think about economic

> opportunity and competition when we develop our auctions. The Middle Class Tax Relief and Job Creation Act tells us that when we develop those auctions we need to make sure that everyone can participate, and that we can have rules of general applicability. So we should balance all of those things and it is my hope that we will have opportunities both for incumbents and new entrants alike. In the end though I don't think a single carrier . . . can walk away with all the spectrum we auction.

Commissioner Rosenworcel did not explicitly say that the FCC will impose restrictions or practice preferential treatment in the upcoming spectrum auctions. However, her statement that a single carrier should not be granted all licenses auctioned hints at her view that the Commission should, somehow, take steps that favor certain carriers or that otherwise condition the auction process.

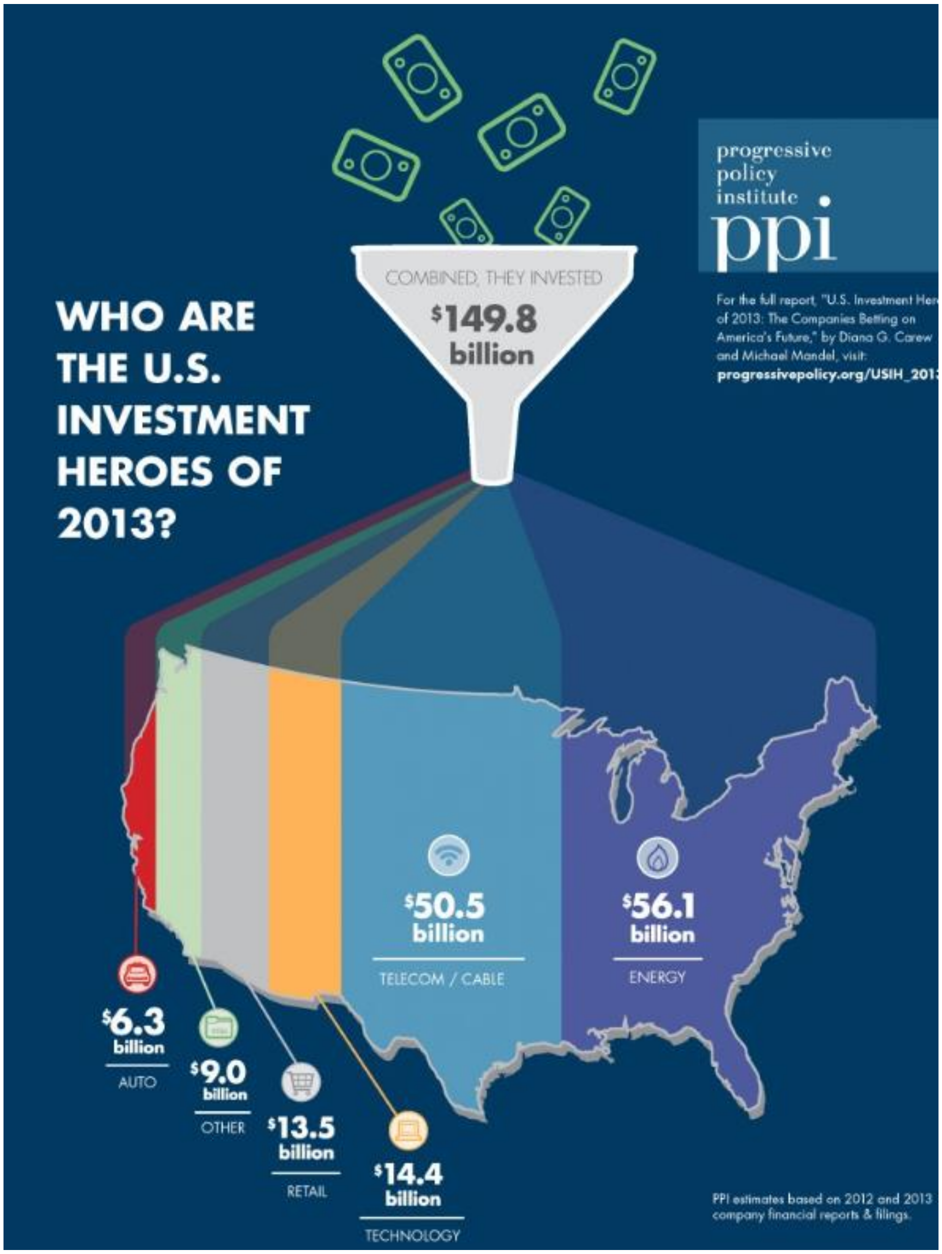
While I don't doubt that Commissioner Rosenworcel's concern regarding the need to promote market competition is made in good faith, the regulatory approach she seems to propose to achieve this goal is nevertheless problematic. The best way to ensure a successful incentive auction is to allow it to proceed free from discriminatory participation rules.

This *Perspectives* discusses how imposing restrictive conditions on spectrum auctions tends to cause many harmful, unintended consequences. First, past spectrum auctions in the U.S., Europe, and Canada have demonstrated the negative impact of discriminatory participation conditions. Those auctions resulted in only short-term new entry in certain markets, delay of spectrum deployment, and vast loss of auction revenue. Second, imposing restrictive conditions on the upcoming incentive auction will likely have the same harmful effects as past auctions, given current market conditions and the unlikelihood of anticompetitive foreclosure. In order to avoid the mistakes of past spectrum auctions, to ensure continued growth and investment in the telecommunications marketplace, and to best serve consumer demands for wireless services, the FCC should not impose restrictive conditions on the upcoming incentive auction.

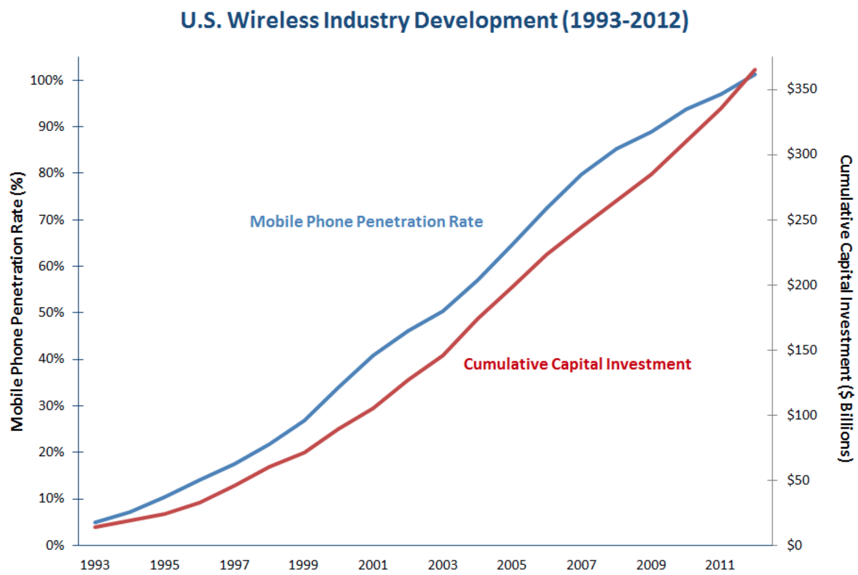
By refraining from imposing discriminatory participation rules, the Commission will enable the proper functioning of the auction process and encourage participation by all willing bidders. Allowing the auction to run without regulatory interference will enable providers to most efficiently acquire spectrum, and in turn, better meet the constantly increasing consumer demand for spectrum.

An Efficient, Successful Spectrum Auction is Crucial to the Digital Marketplace and the U.S. Economy

The communications sector is probably the most dynamic and successful sector of the U.S. economy. There are currently more mobile devices than people in the U.S., and the market is thriving with competition. Telecommunications companies are leaders in domestic capital investments. AT&T and Verizon ranked in the top five "U.S. Investment Heroes of 2013," together investing $34.5 billion last year. The telecommunications and cable sector was responsible for $50.5 billion of investment, comprising more than one-third of total capital investments in the U.S. economy last year, as the figure below illustrates.

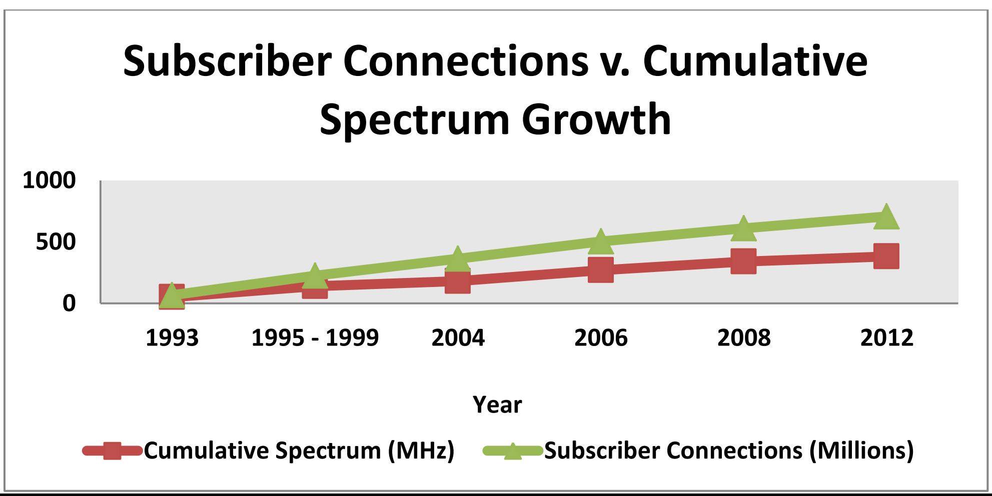


Further, cumulative capital investment in the wireless sector has tracked the rapid penetration of mobile services, as the graph below indicates. At the end of 2012, the mobile phone penetration rate exceeded 100 percent, as many consumers own more than one mobile device, and investment reached nearly $365 billion. As of March 2013, almost all subscribers had a choice between three or more service providers, and wireless networks covered nearly the entire U.S. population.



Sources: Cellular Telecommunications Industry Association (CTIA).

Although the economic success of the communications and technology sector is heartening, subscriber growth far outpaces spectrum availability in the U.S. today. Wireless subscriber connections have grown from 16 million to over 326 million in the last ten years, while cumulative spectrum available for wireless has only increased from 50 to 380 MHz. Put another way, as the figures below illustrate, the growth factor of subscriber connections is 20.4 while the growth factor for cumulative allocated spectrum is merely 7.6. In order to meet the exponentially increasing consumer demand for spectrum, and to promote continued investment in the telecommunications sector, the successful execution of the upcoming incentive auction is crucial to the growth and development of the digital marketplace.



Growth Factor		
Date Range	Cumulative Spectrum (MHz)	Subscriber Connections (Millions)
1993 - 2012	7.6	20.4

The Use of Restrictive Conditions in Past Spectrum Auctions Caused Loss of Revenue, Delayed Spectrum Use, and Harm to Consumers

In past spectrum auctions in the U.S. and abroad, regulatory agencies have set rules which set aside spectrum for certain bidders, limited the amount of spectrum bidders may require, or otherwise distorted the process of the auction. Some competitors have advocated for bidding limitations in the upcoming incentive auction, calling for a "Dynamic Market Rule." Such a rule may be intended to enable market entry and promote competition, but it merely tilts the auction in favor of smaller bidders.

Most often this type regulatory interference has not worked as planned. Overall, imposing restrictive conditions in spectrum auctions causes many unintended consequences including marketplace distortion, delay in deployment of spectrum, depressed revenues, and harm to consumers.

Restrictive conditions have been imposed on spectrum auctions in the U.S. and abroad, with overwhelmingly negative results. At a webinar recently hosted by Mobile Future, Dr. David Sosa of Analysis Group presented his study, which examined the use of discriminatory participation rules in spectrum auctions in the U.S., Europe, and Canada. In the report, "Spectrum Auctions Around the World: An Assessment of International Experiences with Auction Restrictions," Dr. Sosa and co-author Dr. Robert Earle found that the imposition of such rules on auctions resulted in only short-term new entry in certain markets, delay of spectrum deployment, and vast loss of revenue.

For example, in the PCS Auction in the U.S., regulators applied spectrum set asides, billing credits, and favorable financing and repayment terms to "designated entities." According to the study, these encumbrances caused "considerable distortions in the license assignment process," including default on license payment obligations by numerous "designated entities," a decade-long delay of 30 MHz of spectrum deployment due to bankruptcy litigation, and $70 billion in lost consumer welfare due to higher service costs. Overall, Drs. Sosa and Earle found that the imposition of discriminatory conditions decreased competition by preventing the more efficient firms from participating and by distorting the costs and true value of spectrum.

Similarly, discriminatory rules applied to European spectrum auctions failed to alter the market structure and in some countries resulted in long-term harm to the marketplace. European regulators applied spectrum set-asides and caps in UMTS Auctions in 2000-2001. The intent of the regulators was to increase the number of network operators in the market, which consisted of four operators with national licenses in most European countries.

Instead, although the rules allowed temporary market entry in some countries, this artificial change soon gave way to default and bankruptcy litigation by new entrants. This delayed the market's return to the structure in existence before the UMTS Auctions, and even led to market consolidation in Austria's case. Similar results occurred in the auctions in Denmark, Germany, Italy, Switzerland, and the United Kingdom. Clearly, the

European experience suggests that auctions with discriminatory auction participation rules are not an efficient way for regulators to try to change market structure.

Finally, a Canadian spectrum auction resulted in a similar outcome. In the 2001 PCS band auction, regulators did not set aside spectrum for any class of bidders, but they did impose a spectrum cap that limited the ability of certain existing market participants to acquire spectrum in some regions. This cap restricted the four largest carriers from obtaining spectrum, but it still did not result in the emergence of a new national provider as intended. New entry was limited to regional markets. Additionally, the cap arguably caused several licenses to remain unsold at auction, resulting in the waste of spectrum resources.

In the 2008 AWS auction, regulators did not impose spectrum caps but did set aside 44% of available spectrum at a discounted price for new entrants, effectively subsidizing new entrants. Although new providers were able to enter the market by acquiring the set-aside spectrum, today those entrants have been acquired or share the networks of incumbents. Again, auction results were distorted by participation conditions and merely delayed the licensing and use of spectrum by the most efficient market participants.

Dr. Sosa stated in the presentation of his findings:

> As the economic literature has emphasized time and time again [with] participation rules that favor less efficient service providers the one thing we can be certain of is that when participation rules . . . constrain the auction process and prevent the participation of the more efficient providers and favor the less efficient providers the social cost will be significant. In a market like wireless where the consumer surplus on an annual basis is in the range several hundred billion dollars, any constraint on the provision of these services, including and especially the availability of spectrum can cause substantial dead weight losses and substantial harm to consumers.

Former FCC Chief Economist Leslie Marx, now a Duke University professor of economics, also contends that complicated bidding procedures and bidding restrictions in spectrum auctions are "unnecessary and counterproductive." In her just-released report, Dr. Marx analyzed the bidding limitations and spectrum screens proposed by T-Mobile and Sprint for the upcoming incentive auction. She found that the proposals to restrict participation "do not address any real world problem," and despite the smaller carriers' claims, there is an "absence of evidence" that anticompetitive foreclosure is likely.

Additionally, like Dr. Sosa and Dr. Earle, Dr. Marx looked to empirical data from past FCC auctions and demonstrated how imposing bidding restrictions has, and likely will, decrease revenue production and prevent efficient reallocation of spectrum for wireless services. She simulated the 2008 700 MHz and 2006 AWS auction to show what the results would have been if AT&T and Verizon had been excluded from those auctions. She found that revenue would have been 45% lower in the 700 MHz auction and 16% lower in the AWS auction. Overall, Dr. Marx warned that discriminatory participation rules "put at risk the goals of the Incentive Auction: reallocation of spectrum to higher valued uses and revenue generation." She concluded that "the FCC should avoid imposing restrictions on participation in the Incentive Auction."

As the results of past auctions have shown, regulators should not impose discriminatory participation rules on the upcoming incentive auction. Restrictive rules distort the auction process and cause inefficiencies, which result in additional costs for bidders, and eventually cause higher prices and less service availability for consumers.

Conclusion: The FCC Should Not Impose Restrictive Conditions on the Incentive Auction

The FCC should take note of these results and analyses and forbear from imposing discriminatory participation rules on the upcoming incentive auction. As Free State Foundation Visiting Fellow Greg Vogt stated in his piece "Achieving Unanimity," the Commission should reject limitations on bidding eligibility because they are "antithetical to the reverse auction bargain and violate free market principles."

At a recent American Enterprise Institute event, Representative Greg Walden, Chairman of the House Subcommittee on Communications and Technology, recently stated:

> It is [the] spirit of deregulation that fueled our approach to spectrum auctions in the 112th Congress. Demand for spectrum is rapidly outpacing the usable supply. Spectrum that goes unused or underused is leaving American jobs on the table and placing innovation on the back burner. But our spectrum licensing and auction laws fail to reflect this simple truth . . . . Because of the historical distinction [between command and control era licenses for broadcasters and the flexible, and technical standards-based licenses for wireless providers] the FCC has created an artificial limit on the transfer of spectrum from one use to another as markets and technologies evolve. The subcommittees made it our mission to resolve this problem through a new auction mechanism, and I'm proud of the results so far. The FCC is working to implement a first-of-its-kind incentive auction that allows market mechanisms to determine the most economically beneficial use of spectrum and for existing licensees to realize the value of relinquishing this valuable public asset. The spectrum that we make available through the incentive auction will be a significant investment in the wireless information economy and will help America continue to be the world leader in the wireless services . . . . The thing we must do most is get the auction right and not pick winners and losers at the head end.

Although market concentration is a legitimate concern, and it is possible that dominant providers may beat out competitors in acquiring spectrum, it does not follow that regulatory interference is required. As Mr. Vogt argued, "The Commission should not risk meeting the near unanimous desire to repurpose a 'maximum amount of spectrum' for mobile broadband use by tilting the auction scales toward particular bidders."

Instead, while promoting the efficient allocation of spectrum, the Commission can utilize other tools to try to ensure that the market remains competitive like it is today. These include encouraging increasing spectrum supply through innovation and repurposing and facilitating secondary market transactions on a timely basis. If there are concerns about market concentration or competition, the Commission should not attempt to alter the market structure by jerry-rigging the auction under the nebulous public interest standard. Instead, the Department of Justice and Federal Trade Commission are in a better position to address any market concentration issues by applying traditional antitrust principles.

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Further Readings

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