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The Competitive Implications of the DTV Transition

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On February 17, 2009 television broadcasters must switch from analog to digital transmission. Because digital broadcast uses spectrum more efficiently than analog broadcast, the transition allowed the Federal Communications Commission (FCC) to auction 108 MHz from channels 52-69 for higher-value uses. That auction concluded in March 2008 and raised $19 billion. Channels 2-51 remain dedicated to broadcasters for digital over-the-air broadcast.
To date, the primary policy concern with the DTV Transition, as it is called, has been ensuring that viewers can continue to watch television on older analog sets. That concern is understandable from a political perspective. Americans average 4.5 hours a day watching television, and politicians will be inundated with complaints from constituents if their televisions suddenly cease functioning. Little attention, however, has focused on the competitive implications of the transition. Analog over-the-air television is a fairly poor substitute for subscription services (cable and satellite) because of its frequently poor picture quality and the relatively small number of channels. By contrast, digital broadcast can offer video quality equivalent to cable and satellite—including high-definition broadcast—and allows broadcasters to offer multiple channels in the amount of spectrum a single analog channel required. Thus, the transition could make over-the-air broadcast a more robust multichannel video distribution platform and a closer competitor to subscription services, thereby increasing competition in the video distribution market.

The improvements in free over-the-air broadcast have numerous potential implications for market structure and competition. First, new competition would restrain cable and satellite prices as consumers—especially those who subscribe to basic services primarily for purposes of better reception—may be more willing to switch to free over-the-air broadcast. Second, over-the-air broadcasters may generate new types of programming and business models. Third, pay services would face additional pressures to innovate in terms of service and business models. Finally, these changes would call for a re-thinking of many current regulations.

Evidence from the United Kingdom (UK) shows the potential for the transition to reshape the market. Admittedly, the video distribution market in the UK differs in many important ways from the US market. The government is more heavily involved (e.g., it owns the BBC and funds it through a license fee it

charges consumers who own televisions), and far fewer residents of the UK subscribe to pay video services than in the US. As a result, the US market is unlikely to develop the same way. Nevertheless, the radical remaking of the UK video distribution market highlights the profound effects the transition can have. Most notably, to prepare for the transition, a consortium of companies and the government created the "Freeview" service. To receive Freeview consumers must purchase a set-top box, which ranges in price from £20 – £70 (about $39 to $138). Consumers can then receive up to 40 digital channels for no additional fee.

In 2005 Ofcom, the British communications regulator, noted that Freeview was already "changing the dynamics of the TV market" as programmers rushed to offer broadcasts over the platform. Freeview has evolved from a platform solely for free over-the-air broadcast to one that competes more directly with more traditional subscription services. Today, as with cable, consumers can also choose to subscribe to additional services offered over the air on Freeview, including pay-per-view, sports, and other pay channels.

Other competitors in the video distribution market have responded to Freeview's evolution. One satellite company now offers a free tier of service, which requires only that the subscriber purchase a dish, and another satellite provider is poised to follow suit. In other words, the DTV transition has allowed terrestrial over-the-air to become more like cable and has induced subscription satellite to become more like free over-the-air services.

To be sure, over-the-air DTV must overcome some real obstacles if it is to become a robust competitor to cable and satellite. First, the number of people who rely on free over-the-air broadcast is small. According to the FCC, 86 percent of all households with televisions already subscribe to a pay service. Second, no single broadcaster has enough spectrum to be a competitive multichannel distribution platform on its own. Finally, regulations may restrict the types of services broadcasters can offer over their spectrum.

DTV may not realize its full competitive potential if regulators restrict broadcasters' use of spectrum. The United States already missed the opportunity to use the digital broadcast spectrum most efficiently. The best approach, from an efficiency point of view, would probably have been to reclaim all the broadcast spectrum and auction it so it can be employed in its highest-value use. Additional regulations restricting the use of this spectrum would only further reduce its value.

Even though the broadcasters did not pay for their spectrum, its use should not be constrained. Broadcasters should be allowed to use this spectrum to provide the highest value services. That might mean selling it, offering

interactive television or information services, or even aggregating spectrum in order to build a competitive video distribution platform.

It is not possible to know how the video distribution market will develop. Terrestrial over-the-air broadcast may have trouble winning over consumers, but that doesn't mean it is impossible. Cable had trouble competing with free over-the-air broadcast in its early days and had to innovate by investing in new programming, such as HBO, in order to attract consumers. Broadcasters likely will also innovate, given the opportunity.

Many obstacles stand in the way of over-the-air broadcast becoming a competitive video distribution platform in the US. Public policies, however, should not be among them.